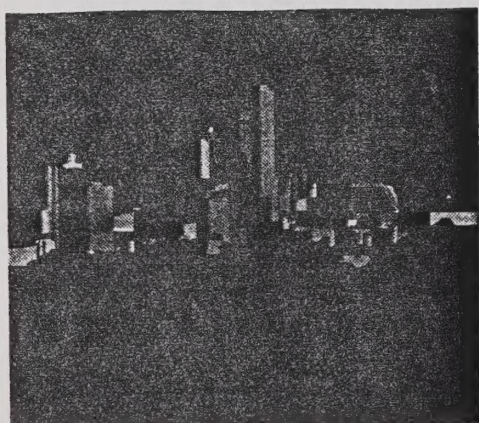


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Bayview Hunters Point Community Health and Environment Check Up



**Tomas Aragon, MD, MPH
SF Dept of Public Health**



**Kevin Grumbach, MD
Medical Effectiveness
Research Center for
Diverse Populations
UCSF**

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***Bayview Hunters Point Health and
Environmental Assessment Task Force***

May 17, 1997

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SURVEY QUESTION WORKSHEET RESPONSES
TOTAL RESPONSES:215

QUESTIONS	RESPONSES
STRESS	211
VIOLENCE	208
UNEMPLOYMENT	204
DETERIORATION OF THE NEIGHBORHOOD	201
DISRESPECT/INSENSITI- VITY TO BLACK PEOPLE	201
DRUGS	196
POVERTY	192
DISCRIMINATION	192
HYPERTENSION	186
DIABETES	182
ACTIVITIES FOR YOUNG PEOPLE	180
POLICE BRUTALITY	177
RACISM	174
NO INSURANCE	163
HARD TO MAKE APPT	163
DIFFICULTY TALKING WITH DOCTOR	159
GETTING A DOCTOR WHO CARES	133
ACTIVITIES FOR YOUNG PEOPLE	131
TOO MUCH CRIME/SAFETY	127
ASTHMA/BRONCHITIS	126
MURDER	123

Demographics (1990)

	<i>BVHP</i>	<i>SF</i>
Population	28,444	723,959
African American	61%	11%
Asian	22%	29%
Age \leq 15 years	25%	14%
Household Income	\$31,900	\$45,700
Below Poverty	25%	13%
Unemployment Rate	13%	6%
Home Ownership	50%	35%

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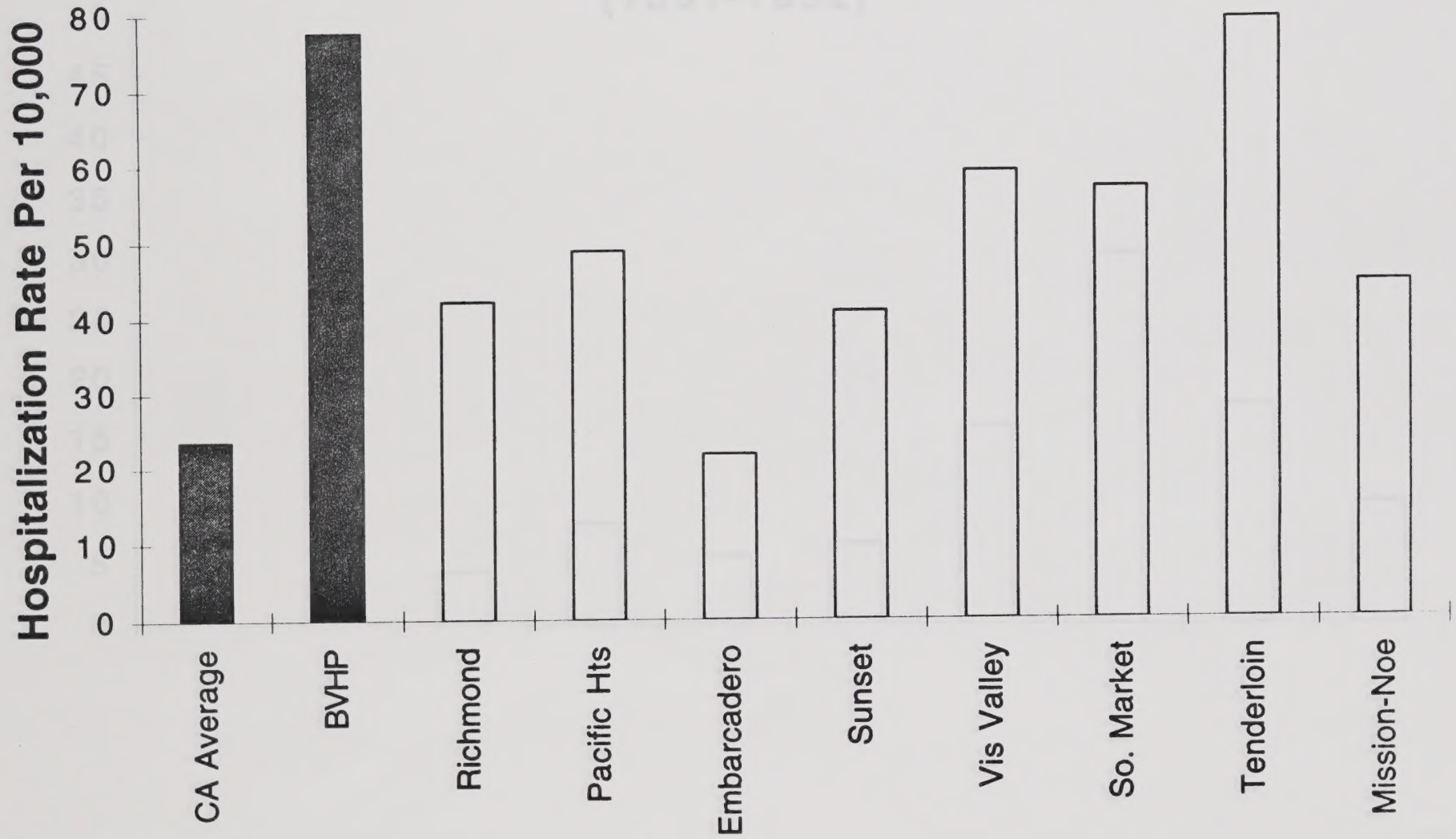
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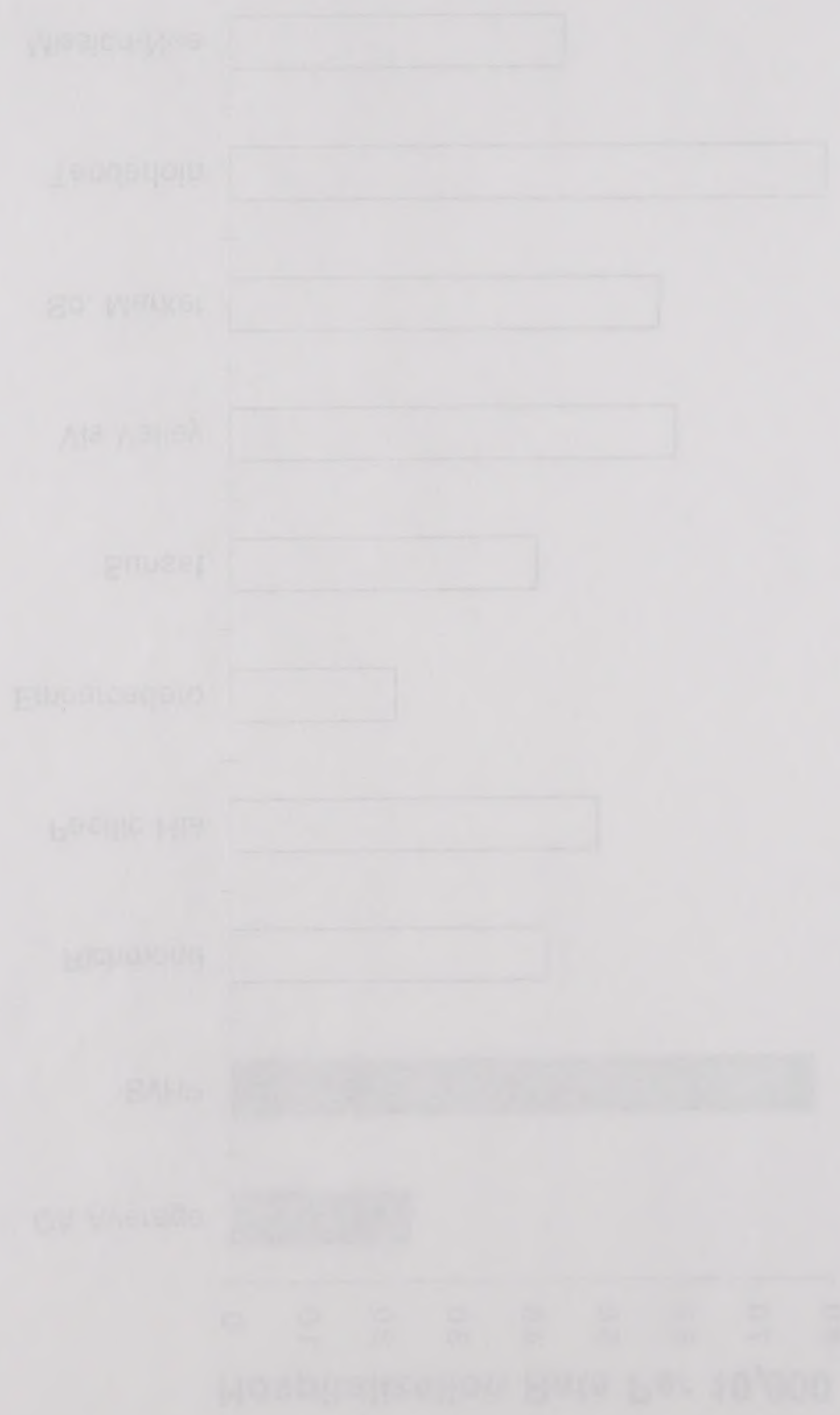
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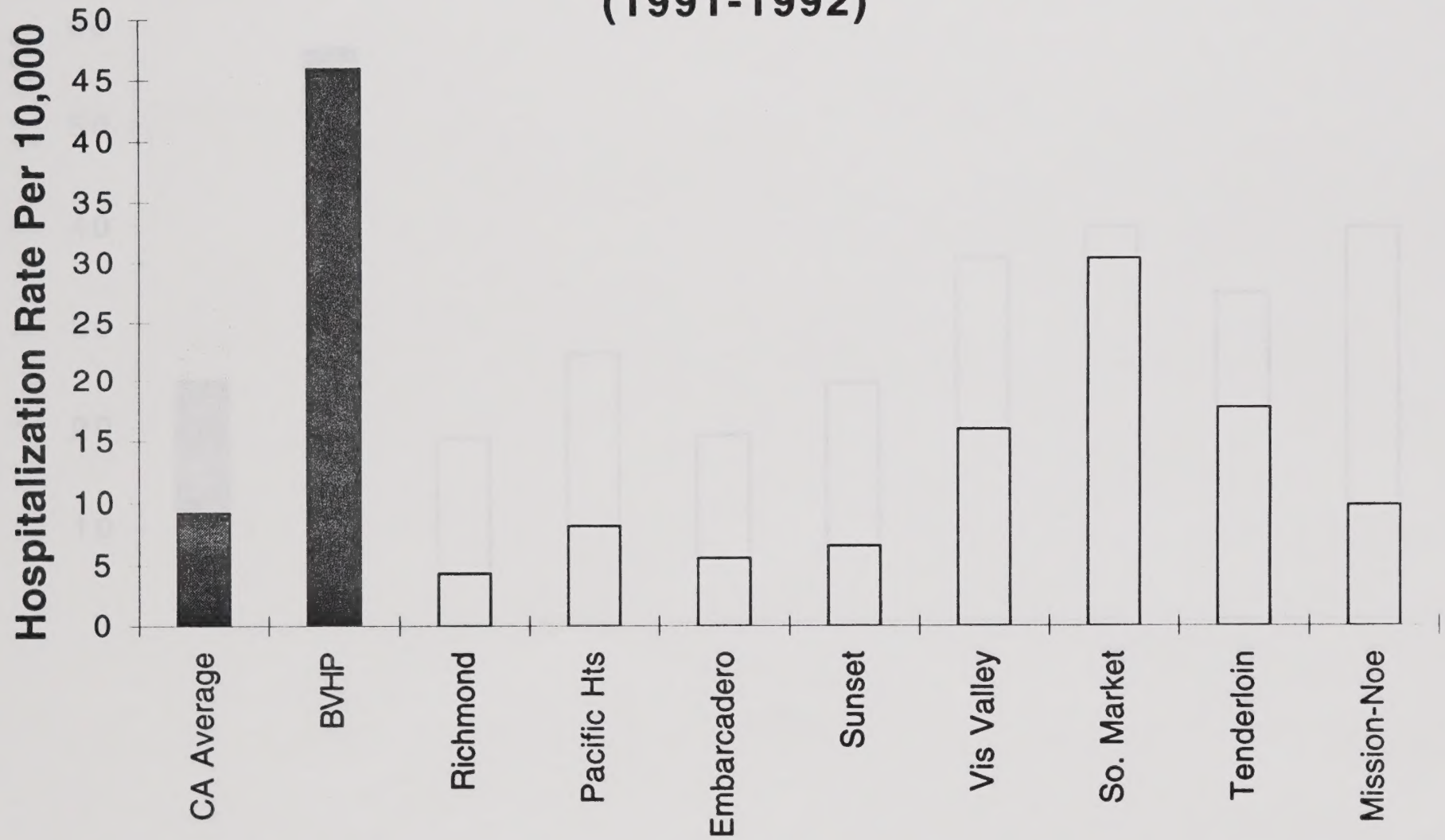
Asthma Hospitalizations Children (1991-1992)



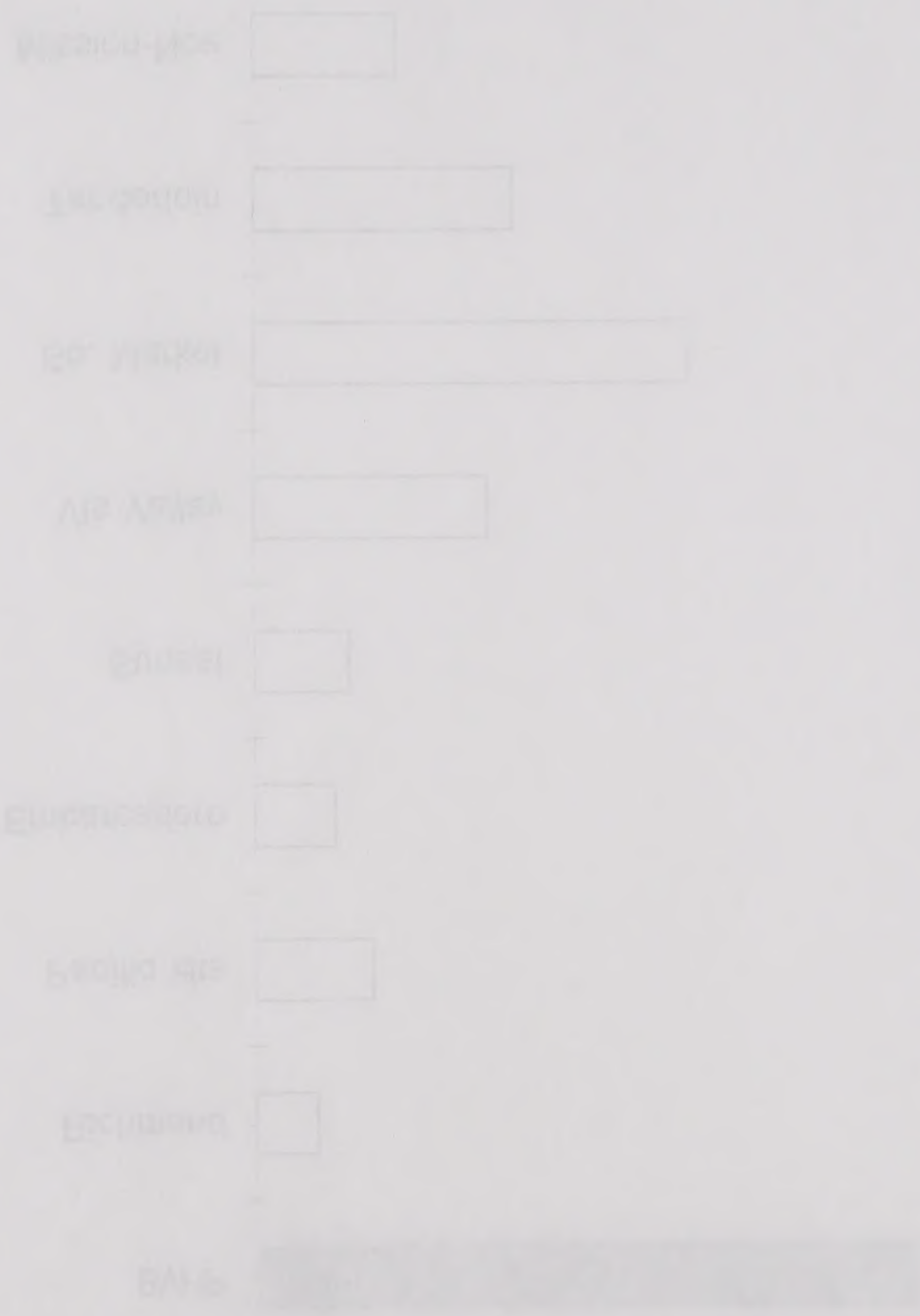
Children (1991-1995)
 Average Monthly Income



Asthma Hospitalizations
Adult Ages 19-64
(1991-1992)

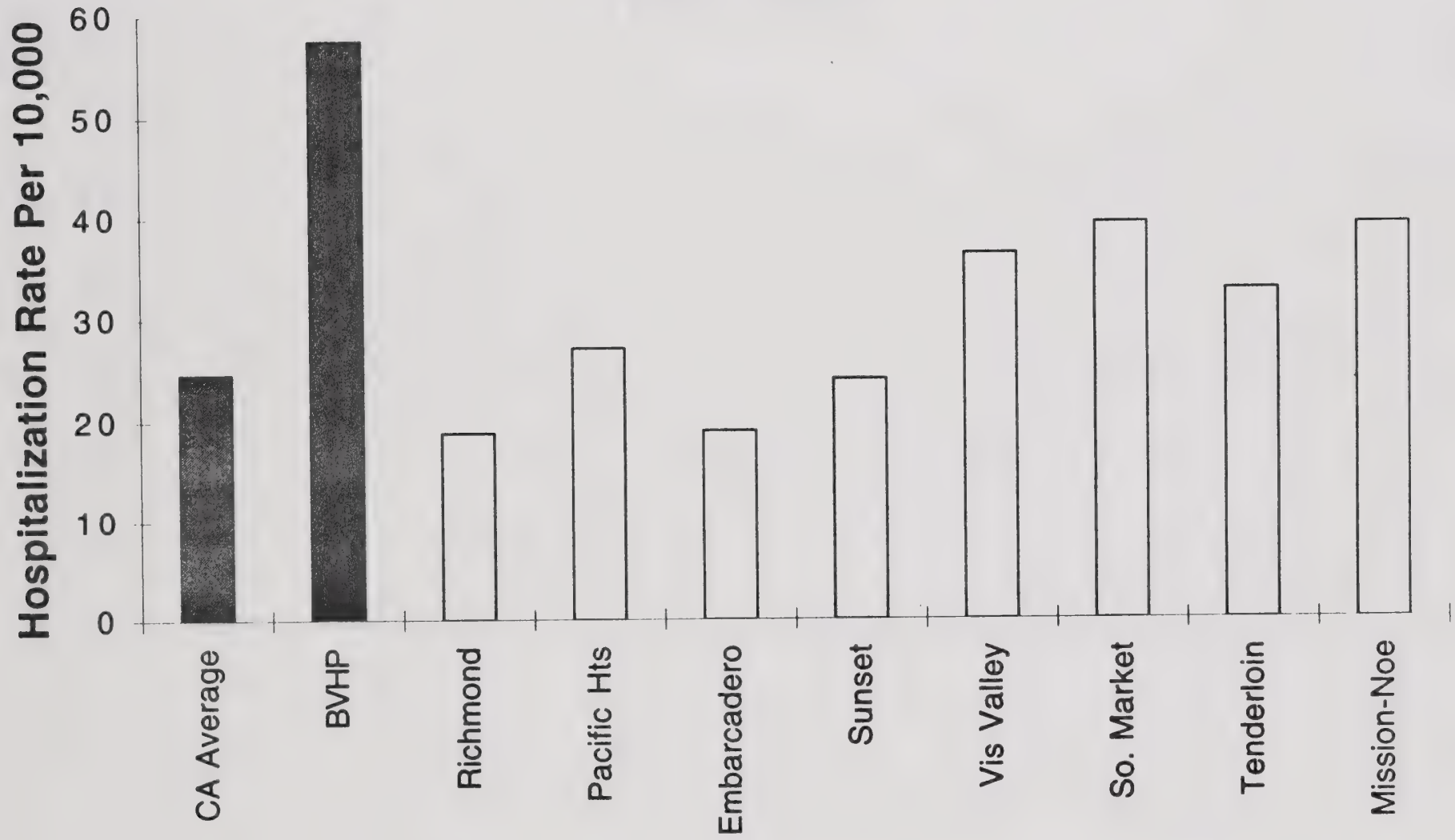


Environmental Impact Assessment (SEA-1001)

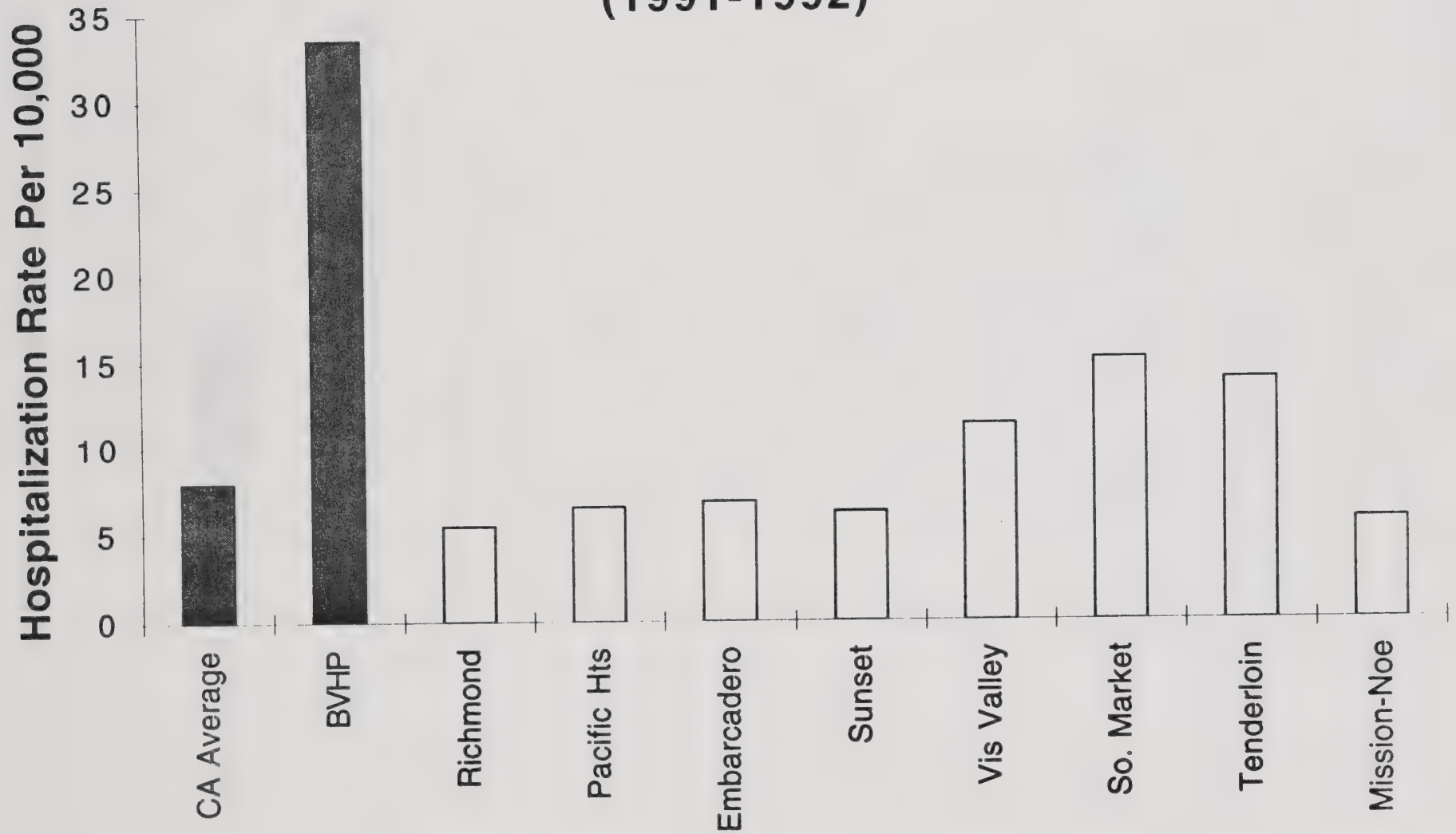


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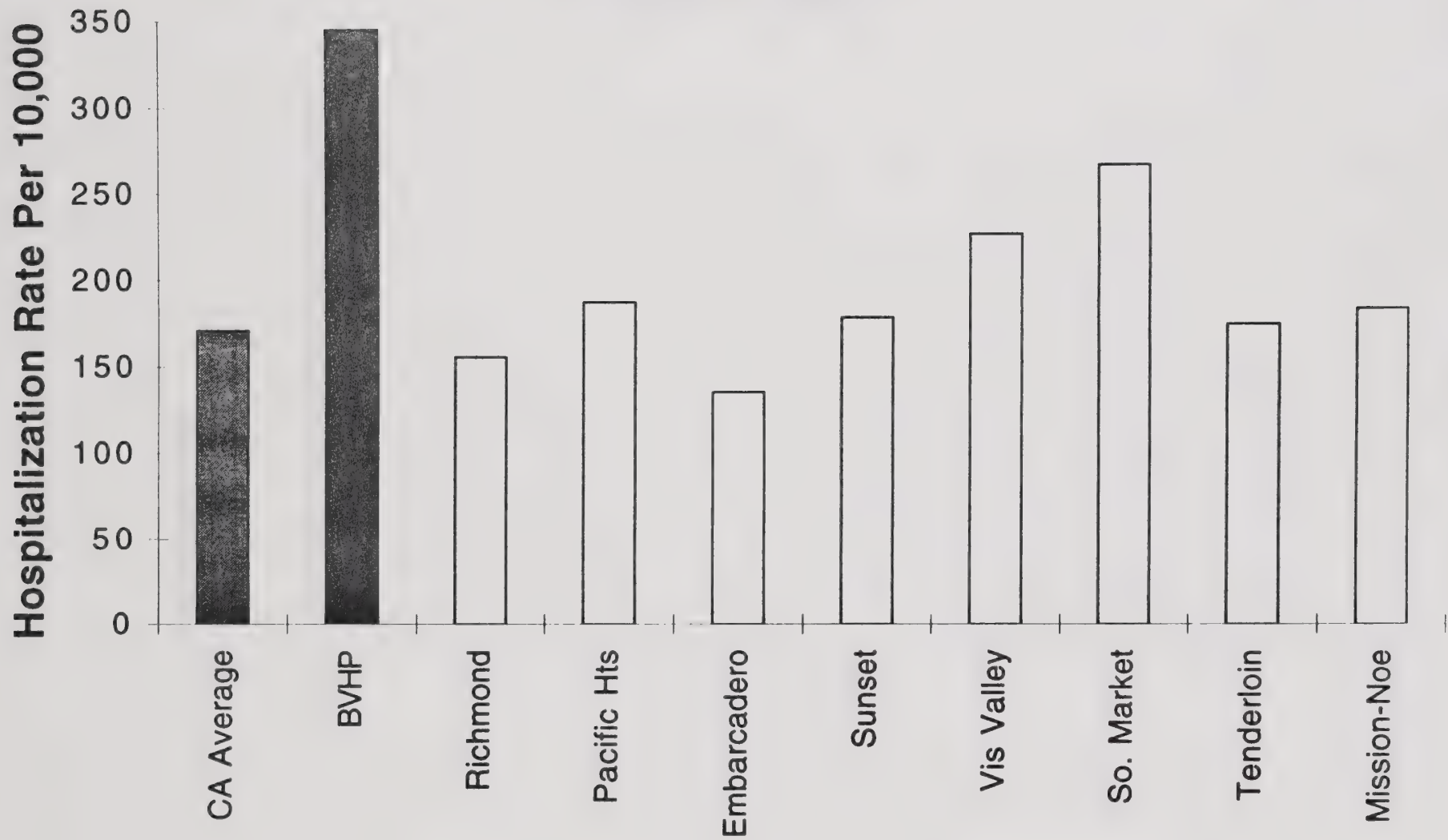
Asthma Hospitalizations Elderly (1991-1992)



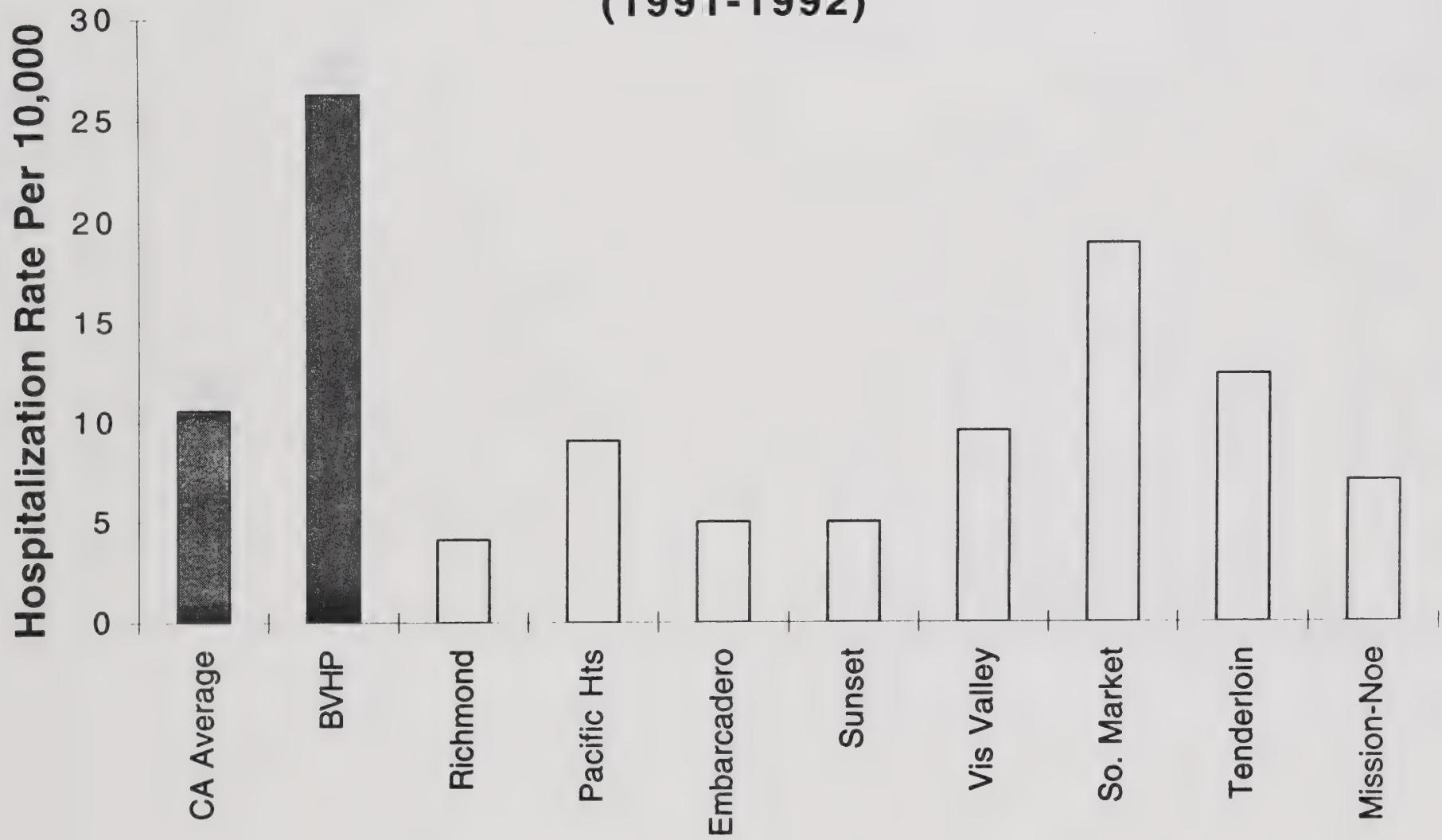
Heart Failure Hospitalizations Adult Ages 19-64 (1991-1992)



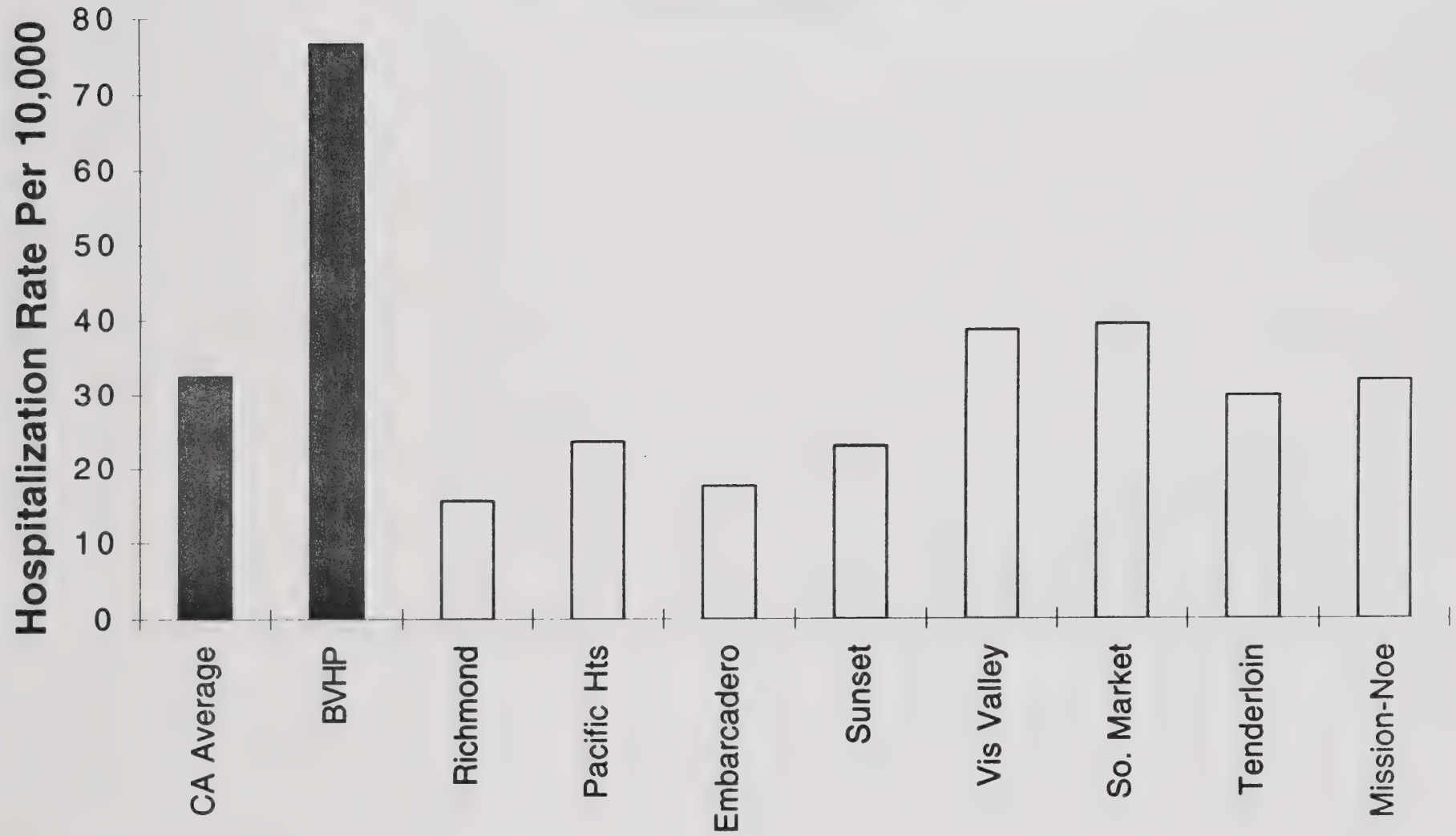
Heart Failure Hospitalizations Elderly (1991-1992)



**Diabetes Hospitalizations
Adult Ages 19-64
(1991-1992)**



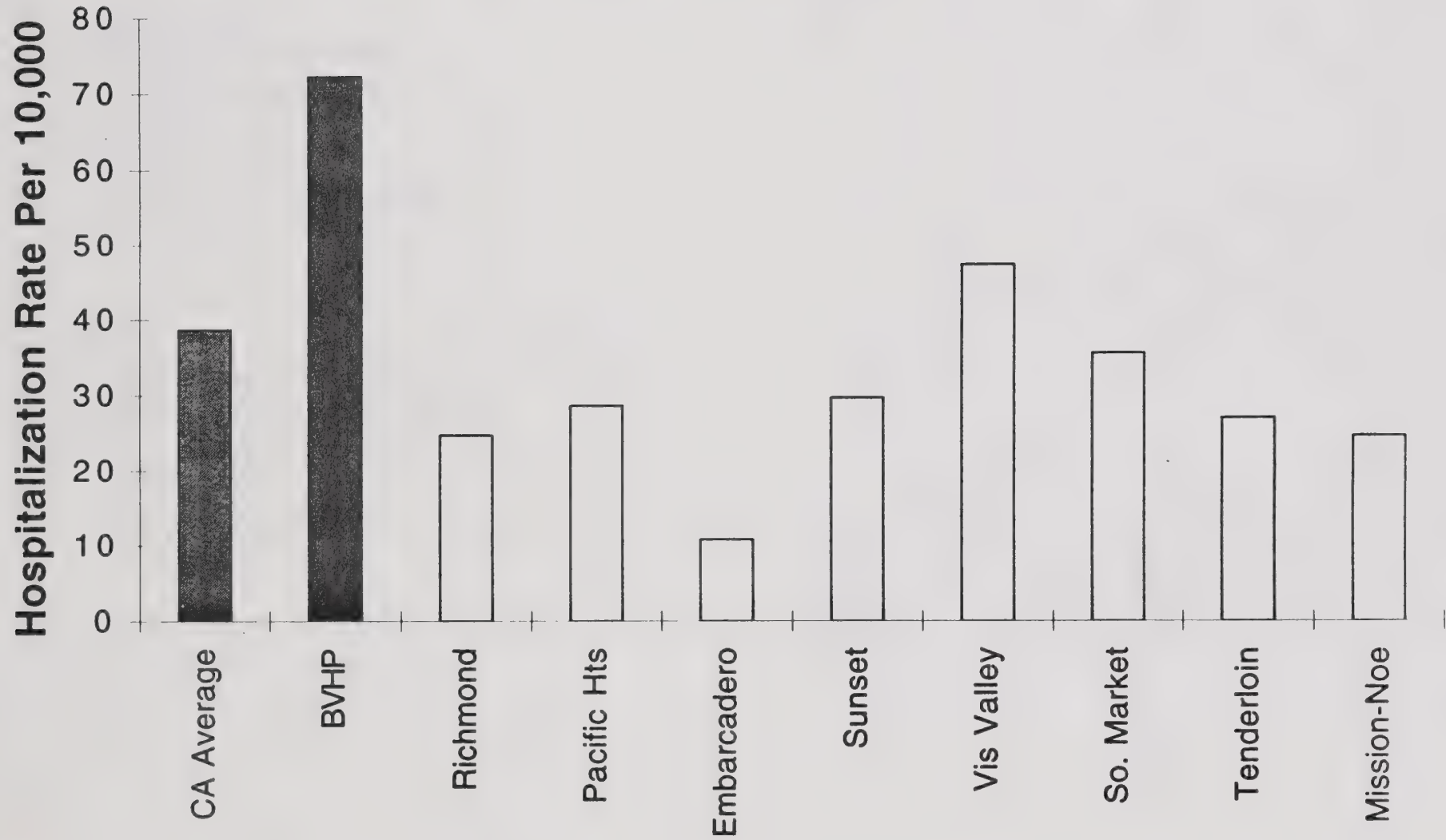
Diabetes Hospitalizations Elderly (1991-1992)



Hypertension Hospitalizations Adult Ages 19-64 (1991-1992)



Hypertension Hospitalizations Elderly (1991-1992)



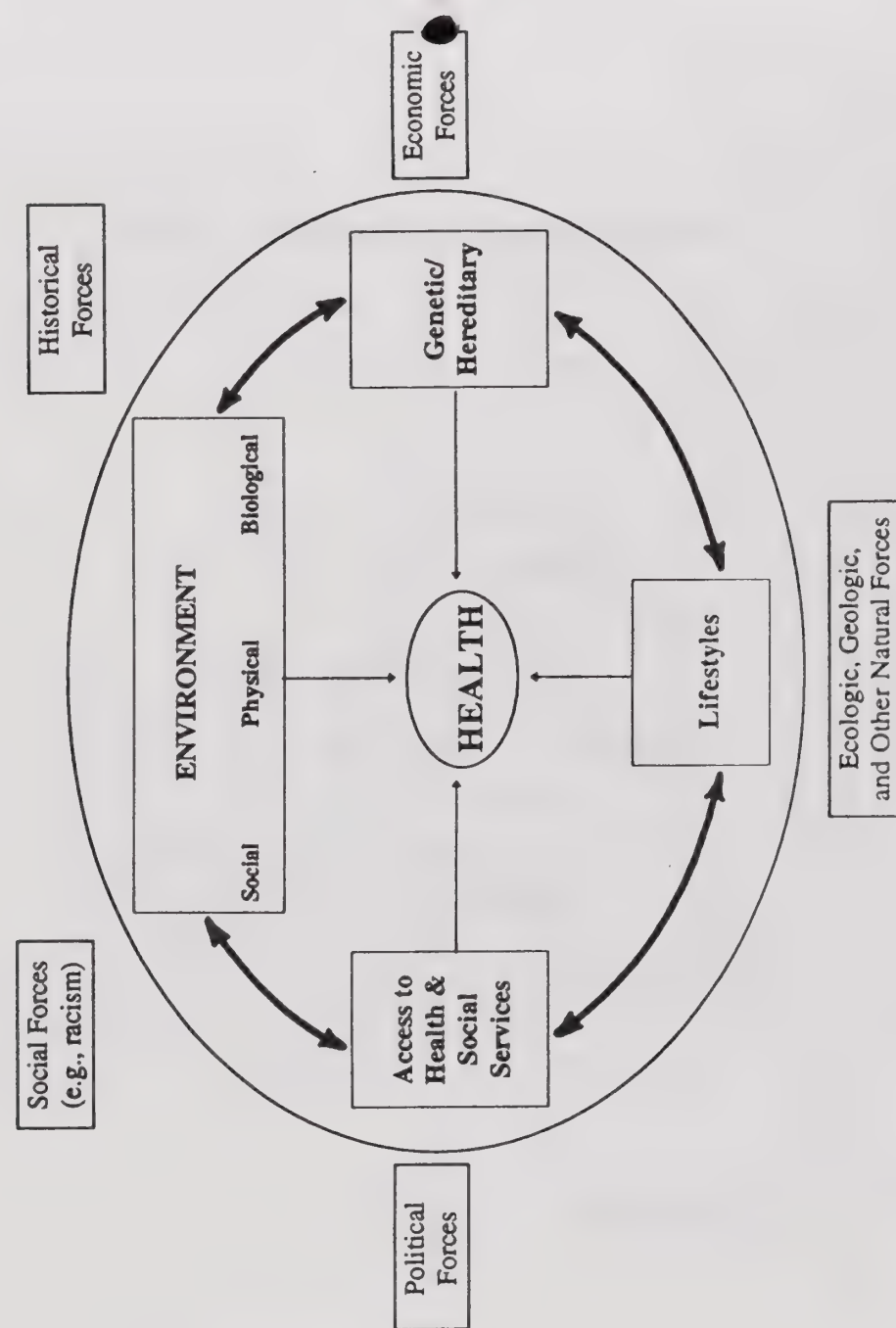
Community Health Mini-Profile

Bayview-Hunters Point Health & Environmental Assessment Project

- Demographics
- Socioeconomic indicators
- Health & wellness Indicators
- Behavioral risk factors
- Health Care Access
- Community & Personal Safety
- Environmental Health

Today:

- Leading cancers in BVHP
- Leading causes of deaths in BVHP
- Environmental exposures in BVHP
 - Toxic Profile
 - Toxic Air Contaminants
 - Lead poisoning



Community Health Mini-Profile

Bayview-Hunters Point Health & Environmental Assessment Project

Breast, Cervical, Colorectal, Lung, and Prostate Cancer: Incidence by San Francisco Planning District

Daramöla Cabral Evins, DrPH, PA
Tomás Aragón, MD, MPH

Office of Chronic Disease Epidemiology
Community Health & Safety Division
San Francisco Department of Public Health

DRAFT

May 14, 1997

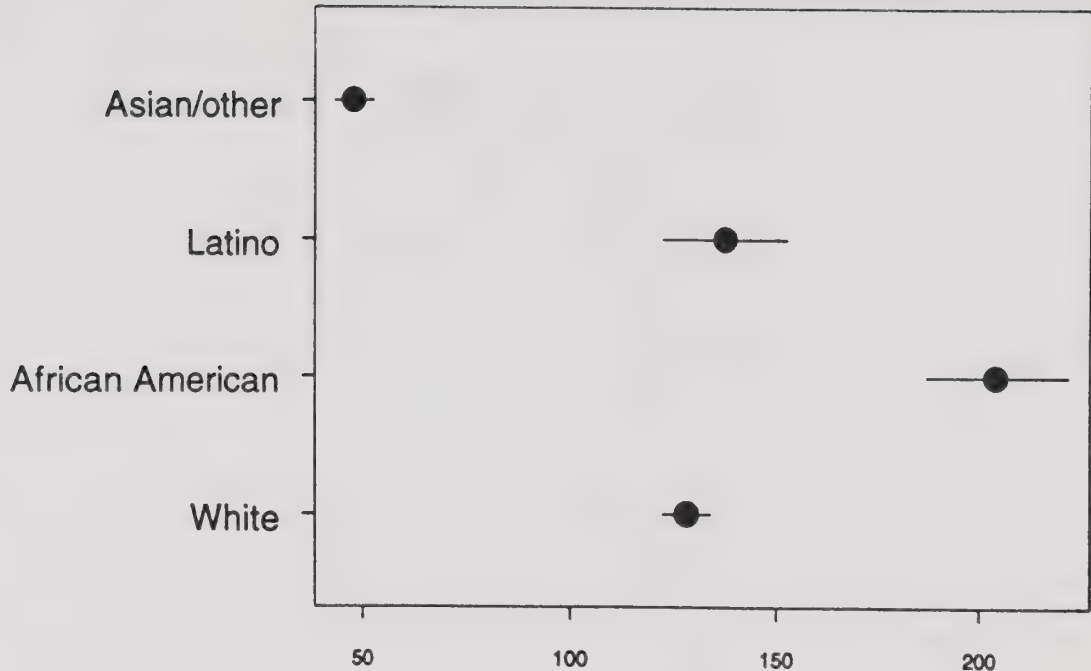
The Bayview-Hunters Point Health & Environmental Assessment Task Force is a collaborative effort between Bayview-Hunters Point neighborhood residents and the following organizations: Golden Gate University Environmental Law & Justice Clinic; Sout East Alliance for Environmental Justice; Northern California Cancer Center; Lead Poisoning Prevention Project; University of California, San Francisco; San Francisco Department of Public Health, California Department of Health Services, and more.

Figure 1. San Francisco Planning Districts



Mapped by Ricardo E. Bermúdez
SF DPH Chronic Disease Epidemiology

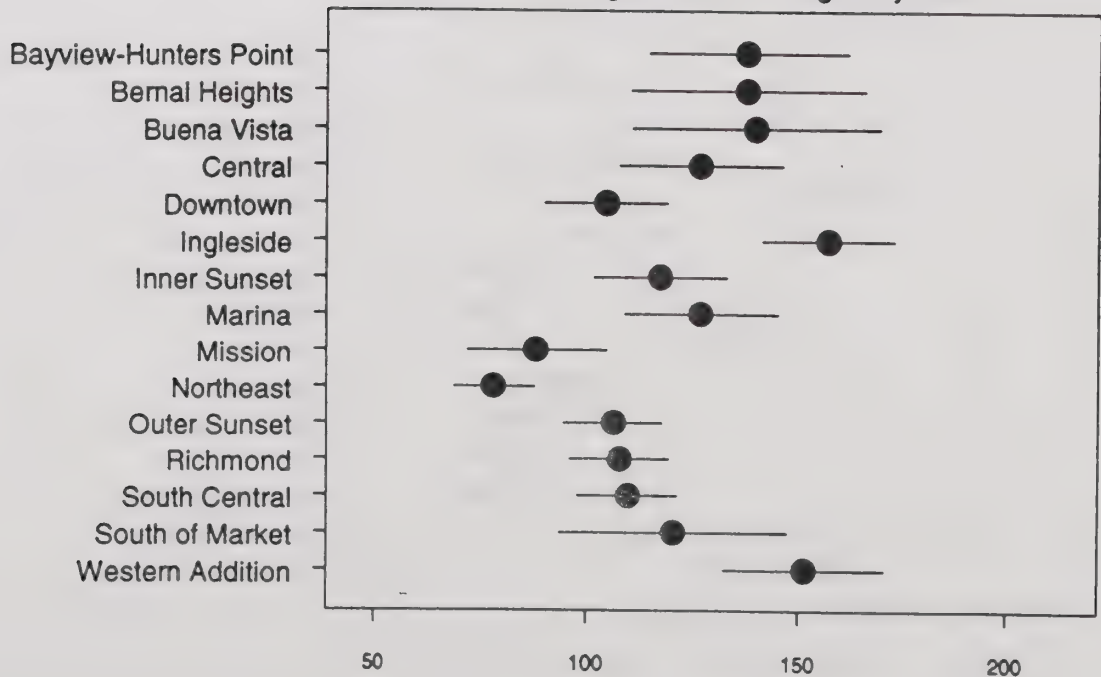
San Francisco Male Prostate Cancer Rates 1987-1993
By Race/Ethnicity and Age-adjusted



Rate per 100,000 per year

Source: Epidemiology, SFDPH

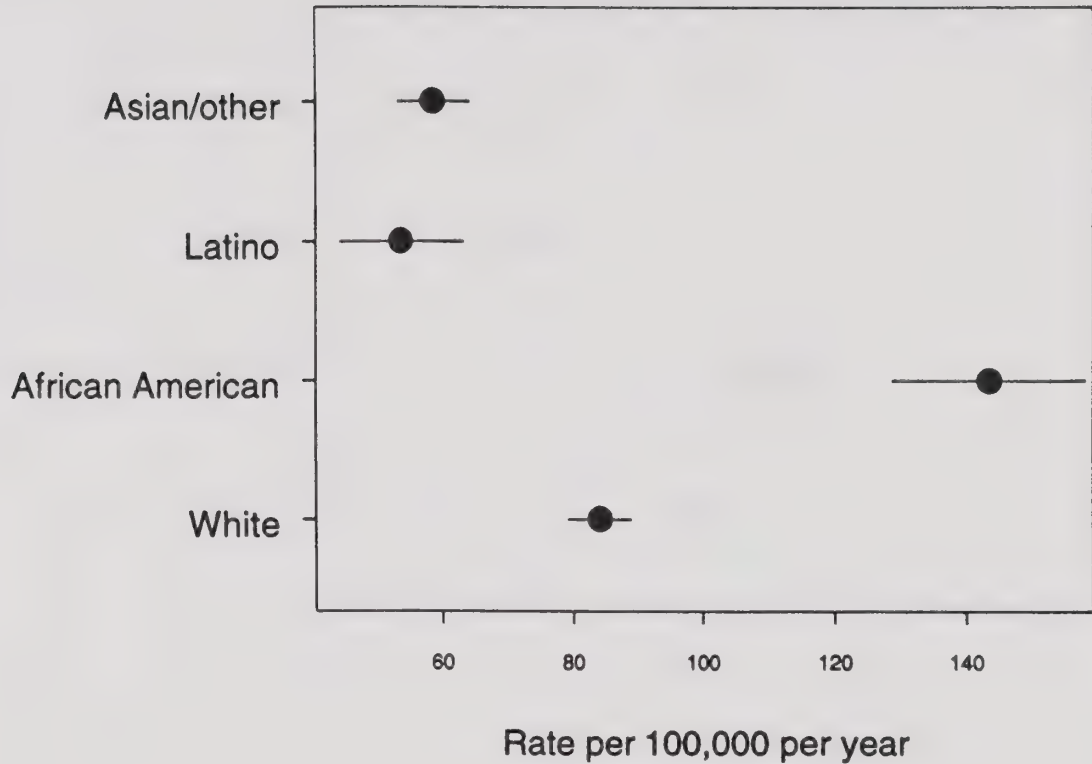
San Francisco Male Prostate Cancer Rates 1987-1993
By Planning District and Age-adjusted



Rate per 100,000 per year

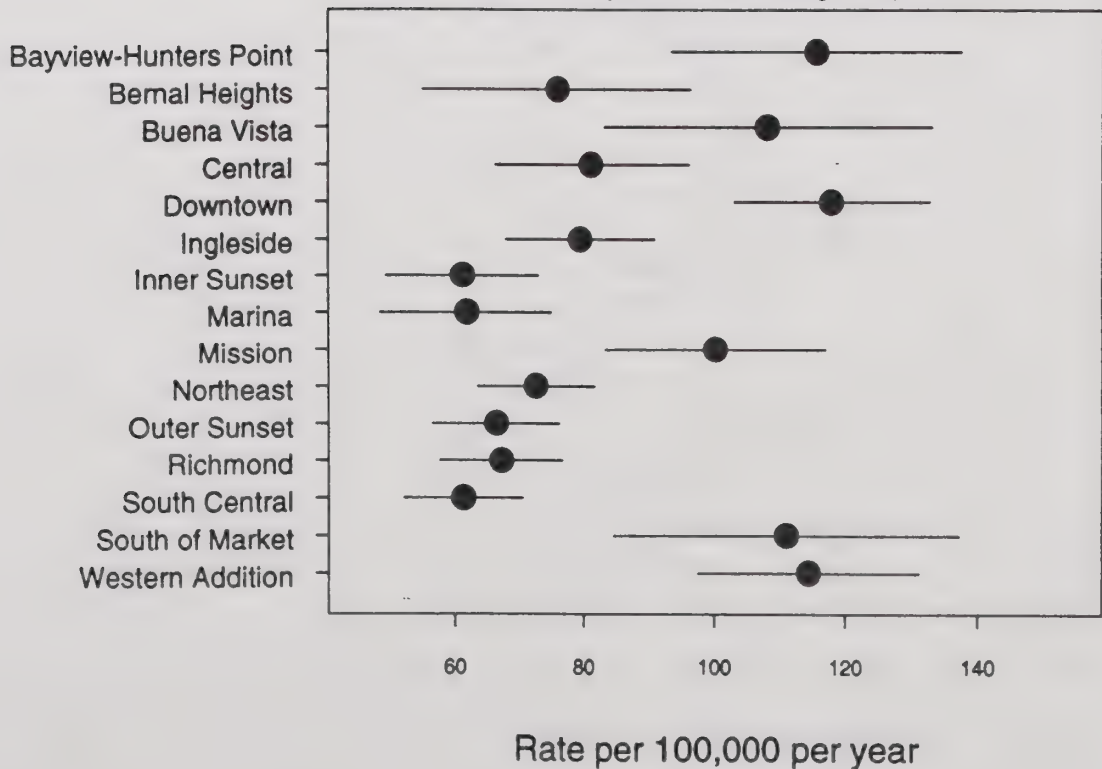
Source: Epidemiology, SFDPH

San Francisco Male Lung Cancer Rates 1987-1993
By Race/Ethnicity and Age-adjusted



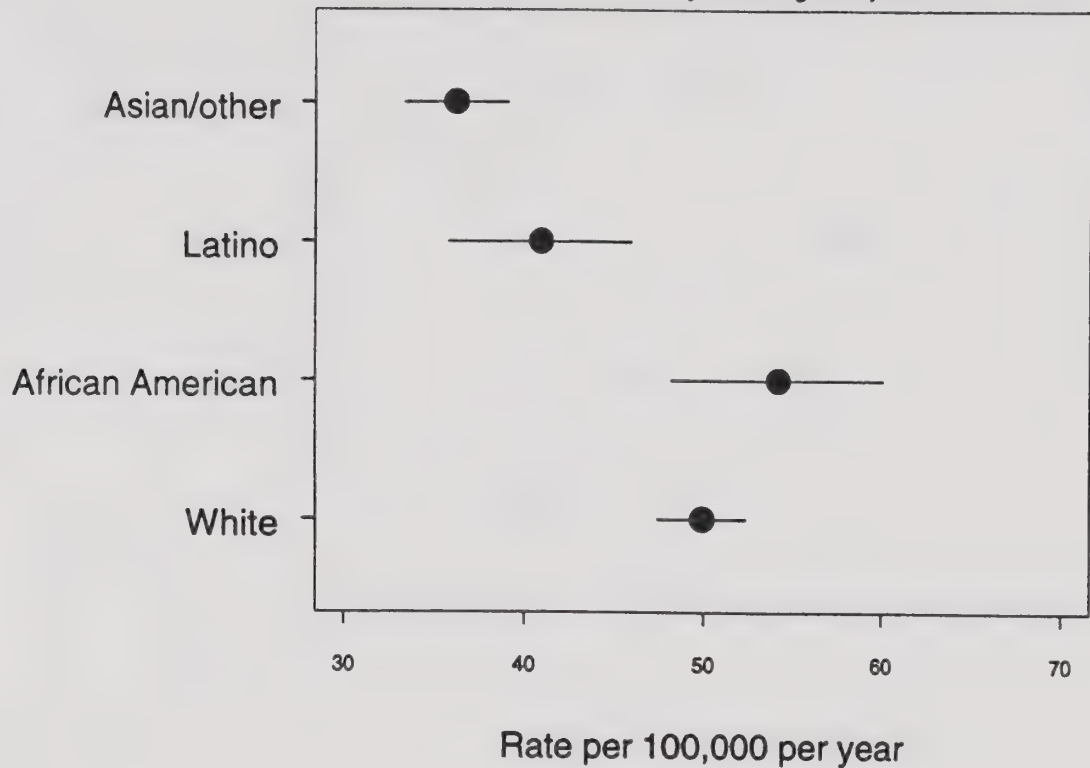
Source: Epidemiology, SFDPH

San Francisco Male Lung Cancer Rates 1987-1993
By Planning District and Age-adjusted



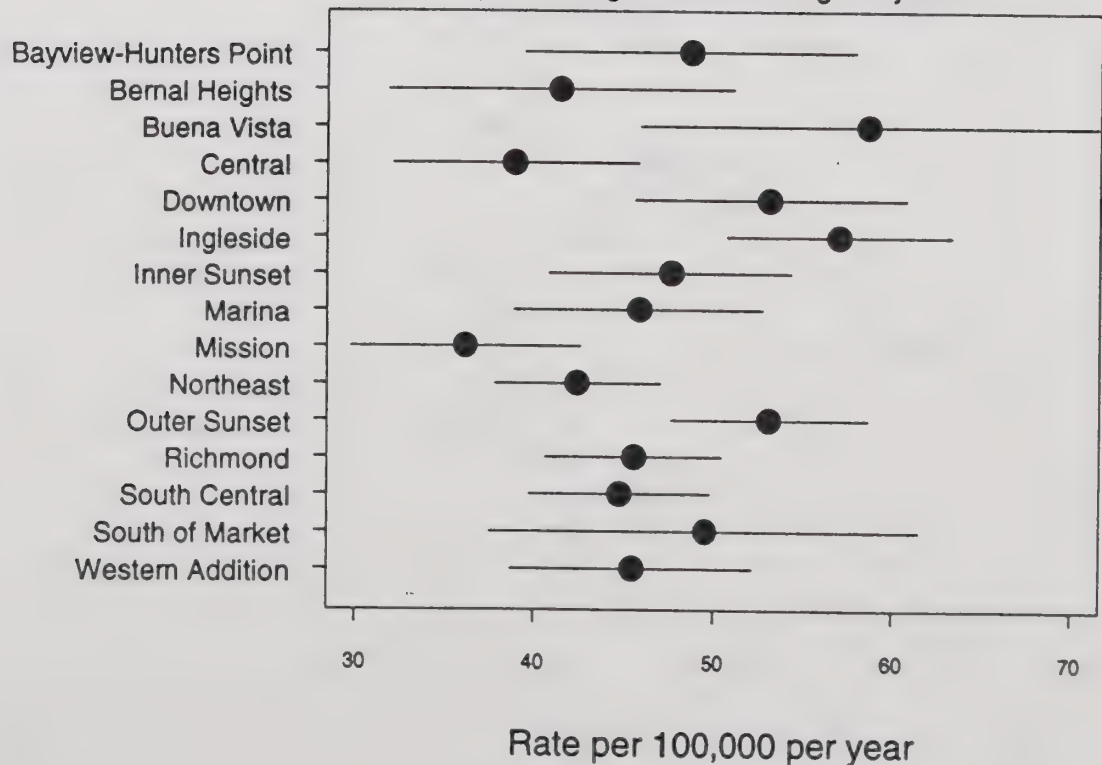
Source: Epidemiology, SFDPH

San Francisco Combined Colorectal Cancer Rates 1987-1993
By Race/Ethnicity and Age-adjusted



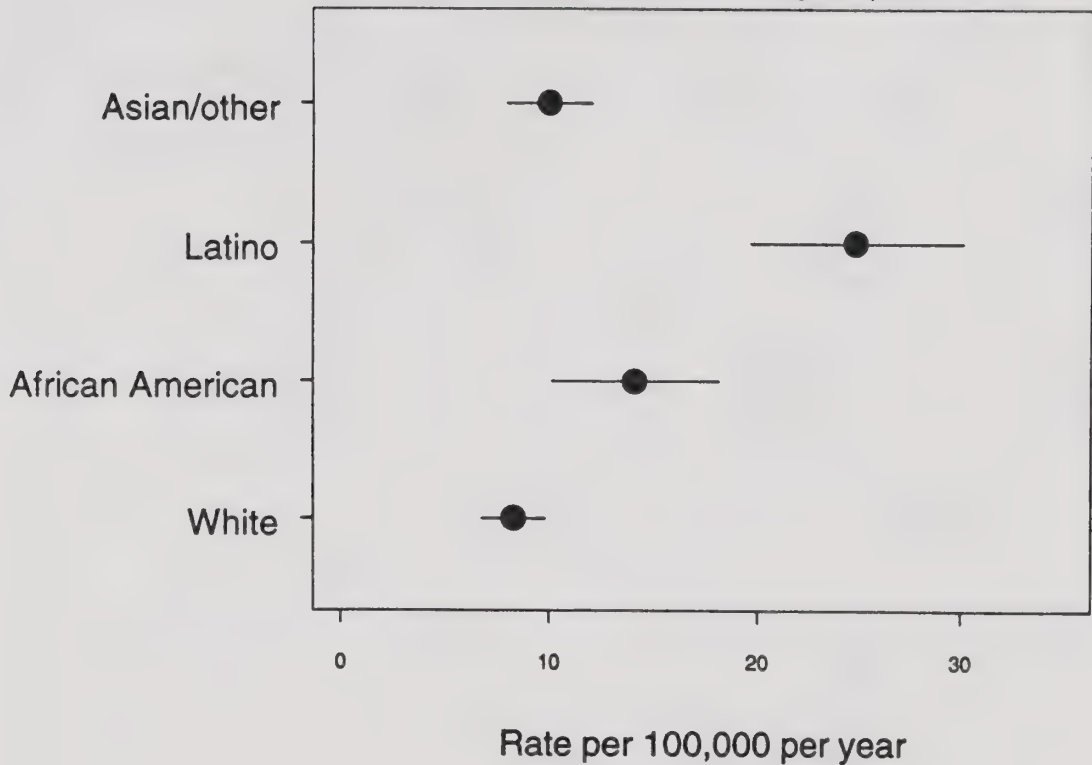
Source: Epidemiology, SFDPH

San Francisco Combined Colorectal Cancer Rates 1987-1993
By Planning District and Age-adjusted



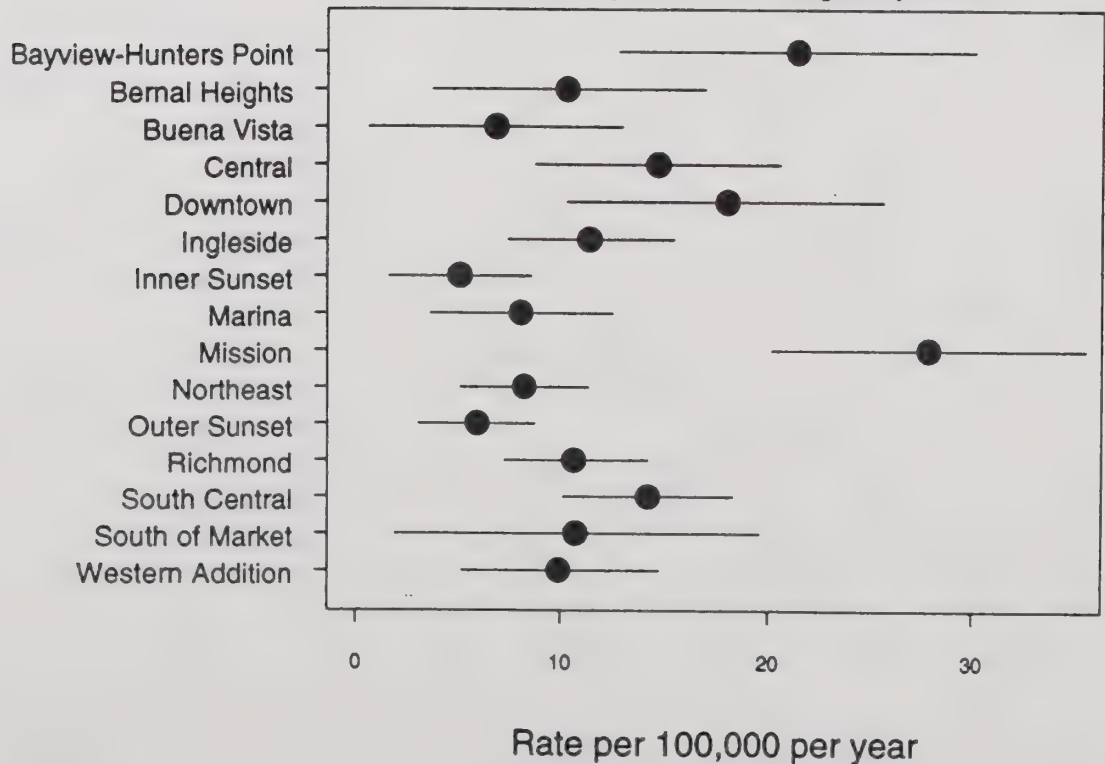
Source: Epidemiology, SFDPH

San Francisco Female Cervical Cancer Rates 1987-1993
By Race/Ethnicity and Age-adjusted



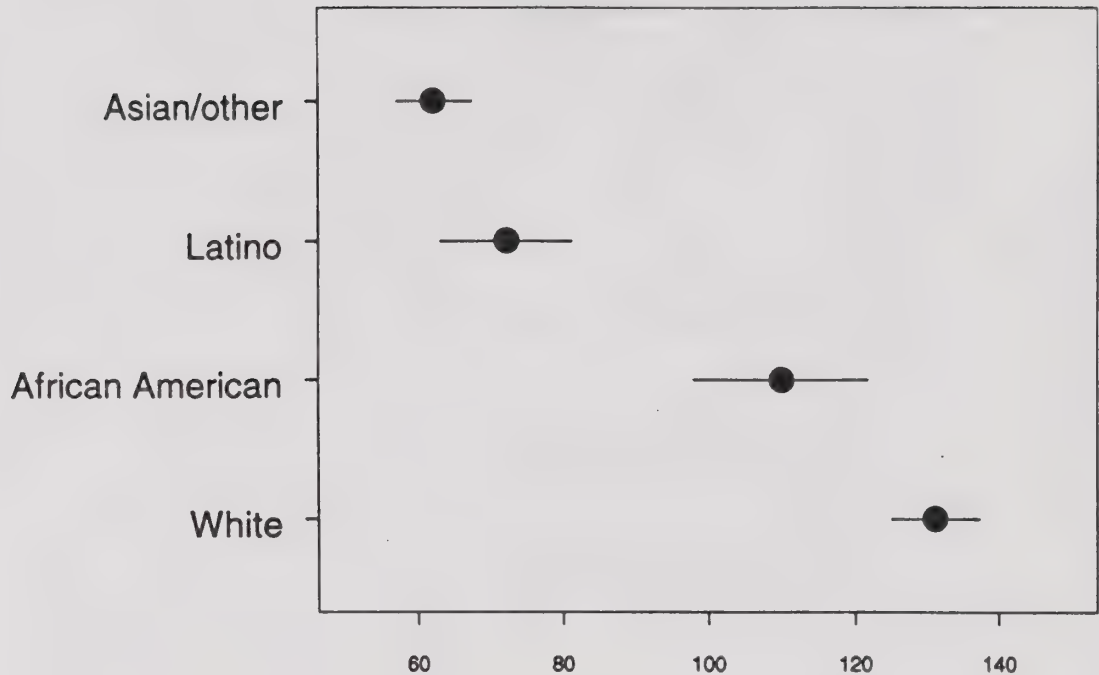
Source: Epidemiology, SFDPH

San Francisco Female Cervical Cancer Rates 1987-1993
By Planning District and Age-adjusted



Source: Epidemiology, SFDPH

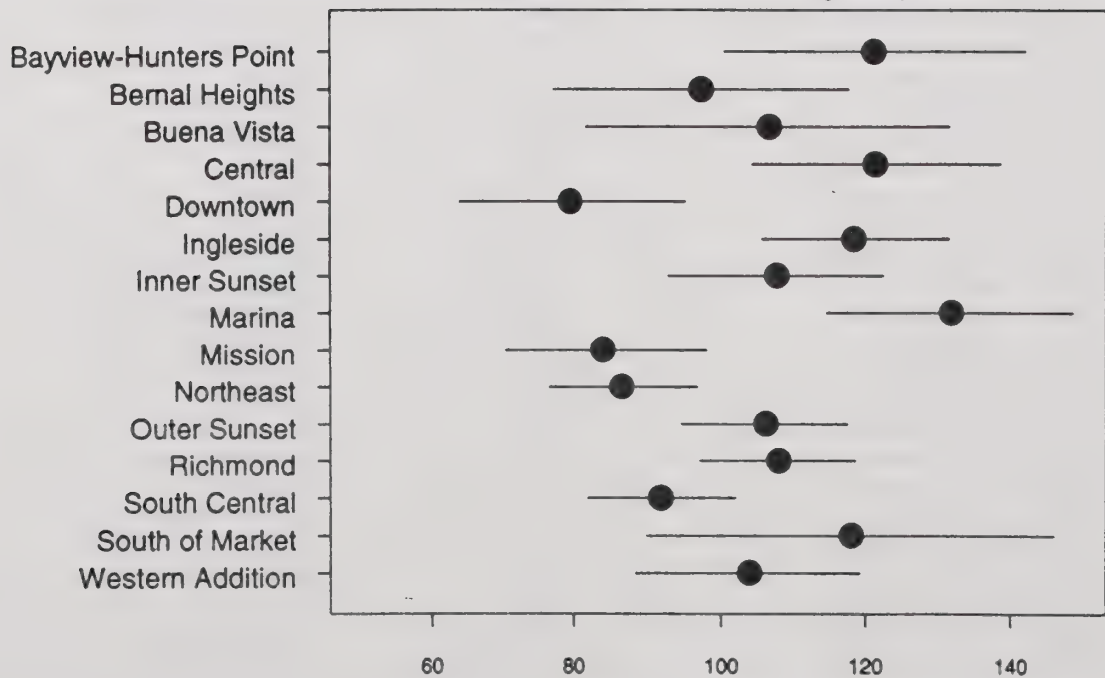
San Francisco Female Breast Cancer Rates 1987-1993
By Race/Ethnicity and Age-adjusted



Rate per 100,000 per year

Source: Epidemiology, SFDPH

San Francisco Female Breast Cancer Rates 1987-1993
By Planning District and Age-adjusted



Rate per 100,000 per year

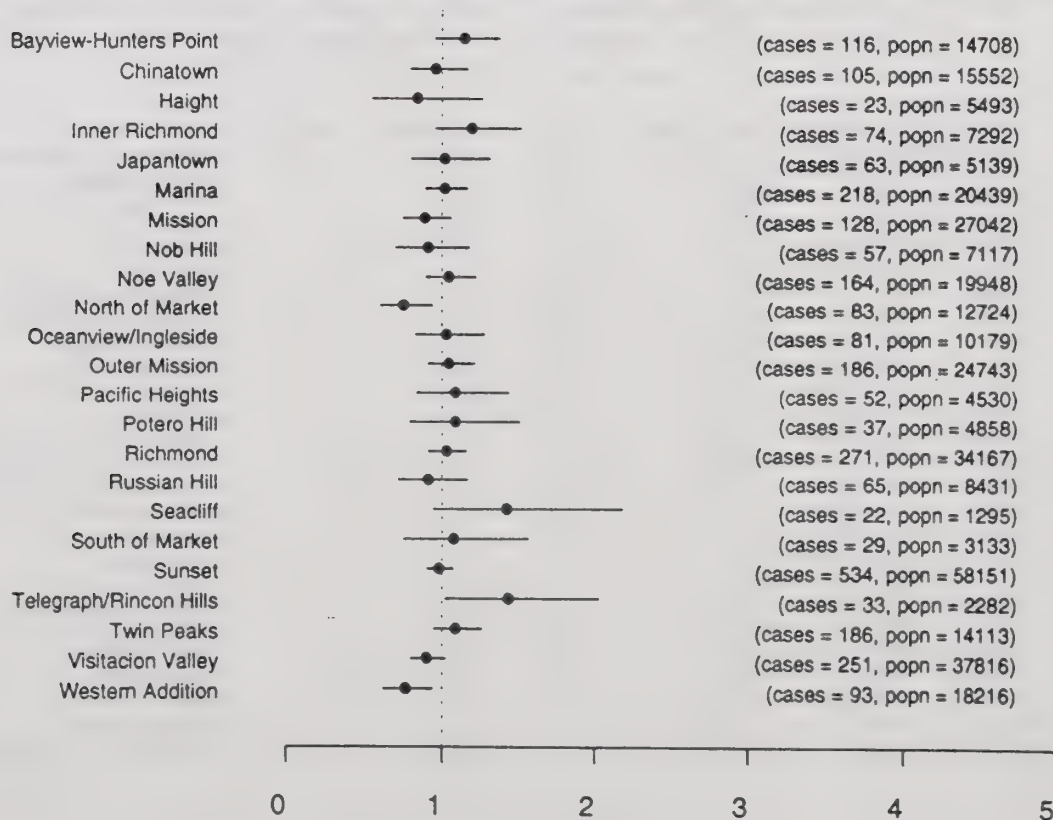
Source: Epidemiology, SFDPH

Bayview-Hunters Point Cancer Incidence Study
 San Francisco Department of Public Health
 Debra Gillis, MD, MPH

Female Cancer Incidence 1988-92

Site	Obs	Exp	SIR	P-value
All sites	342	311.5	1.10	0.080
Breast	107	84.5	1.27	0.014
Lung, bronchus	45	42.0	1.07	0.640
Colorectal	40	42.0	0.95	0.760
Cervix	22	11.5	1.91	0.002
NH Lymphoma	15	11.5	1.30	0.300
Leukemia	9	6.5	1.38	0.330
Brain	4	3.0	1.33	NS
Bladder	2	4.5	0.44	NS
Childhood	2	3.0	0.67	NS

Figure 7. Breast Cancer in San Francisco Neighborhoods
 Age- & Race-Standardized Incidence Ratios, 1988-93 Data



BREAST CANCER UPDATE 1988-93
Invasive Breast Cancer in San Francisco Neighborhoods 1988-93
Age-Race Standardized Incidence Ratios (SIRs)

neighborhood	pop90	observed	expected	SIR	lci	uci	pvalue
north.of.market	12724	86	114.72	0.75	0.6068	0.9261	0.0084
western.addition	18216	100	126.98	0.79	0.6474	0.9580	0.0188
haight	5493	23	28.62	0.80	0.5341	1.2094	0.3387
mission	27042	132	149.59	0.88	0.7440	1.0465	0.1622
visitacion.valley	37816	258	290.03	0.89	0.7874	1.0050	0.0641
russian.hill	8431	66	74.19	0.89	0.6989	1.1323	0.3717
nob.hill	7117	61	65.57	0.93	0.7238	1.1956	0.6149
china.town	15552	109	113.80	0.96	0.7938	1.1556	0.6866
sunset	58151	553	566.07	0.98	0.8988	1.0618	0.5973
marina	20439	226	223.50	1.01	0.8876	1.1520	0.8935
japan.town	5139	65	64.39	1.01	0.7916	1.2873	0.9889
oceanview.ingleside	10179	83	82.00	1.01	0.8162	1.2551	0.9562
richmond	34167	282	274.51	1.03	0.9141	1.1545	0.6730
south.of.market	3133	29	27.89	1.04	0.7226	1.4963	0.9079
noe.valley	19948	173	163.46	1.06	0.9118	1.2284	0.4797
outer.mission	24743	199	184.11	1.08	0.9407	1.2420	0.2888
twin.peaks	14113	194	177.75	1.09	0.9481	1.2563	0.2376
potero.hill	4858	39	35.36	1.10	0.8058	1.5094	0.5979
pacific.heights	4530	56	49.72	1.13	0.8667	1.4635	0.4126
bayview.hunters.point	14708	121	105.29	1.15	0.9616	1.3733	0.1383
inner.richmond	7292	79	64.36	1.23	0.9845	1.5303	0.0780
telegraph.rincon.hills	2282	36	24.00	1.50	1.0821	2.0796	0.0189
seacliff	1295	24	16.04	1.50	1.0031	2.2328	0.0624

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BREAST CANCER UPDATE 1988-93
Invasive Breast Cancer in San Francisco Neighborhoods 1988-93
Age-Race Standardized Incidence Ratios (SIRs)
for African Americans

	observed	expected	SIR	lower95%ci	upper95%ci	p-value
south.of.market	2	2.34	0.86	0.2142	3.4245	0.9141
potero.hill	2	5.93	0.34	0.0843	1.3480	0.1588
mission	7	5.65	1.24	0.5911	2.6009	0.7191
noe.valley	8	8.56	0.93	0.4674	1.8688	0.9836
marina	4	2.65	1.51	0.5671	4.0256	0.6003
pacific.heights	0	1.02	0.00	0.0000	NA	0.6080
western.addition	48	63.37	0.76	0.5708	1.0051	0.0618
japan.town	14	10.20	1.37	0.8131	2.3181	0.3010
inner.richmond	8	6.96	1.15	0.5744	2.2969	0.8393
haight	5	7.43	0.67	0.2800	1.6165	0.4786
outer.mission	11	10.49	1.05	0.5805	1.8928	0.9985
visitacion.valley	28	30.70	0.91	0.6297	1.3208	0.6910
bayview.hunters.point	82	73.71	1.11	0.8960	1.3813	0.3642
telegraph.rincon.hills	1	1.00	1.00	0.1402	7.0681	0.6209
china.town	1	0.48	2.06	0.2905	14.6384	0.9828
nob.hill	2	1.09	1.83	0.4572	7.3092	0.6980
russian.hill	2	1.30	1.54	0.3858	6.1677	0.8582
north.of.market	3	6.59	0.46	0.1468	1.4116	0.2287
seacliff	1	0.07	14.18	1.9981	100.6986	0.1057
richmond	9	6.50	1.38	0.7200	2.6596	0.4337
sunset	10	10.44	0.96	0.5156	1.7810	0.9841
twin.peaks	9	9.05	0.99	0.5173	1.9108	0.8817
oceanview.ingleside	48	45.36	1.06	0.7975	1.4043	0.7502

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Invasive Breast Cancer in Bayview-Hunters Point Counts by Race/Ethnicity, 1973-93

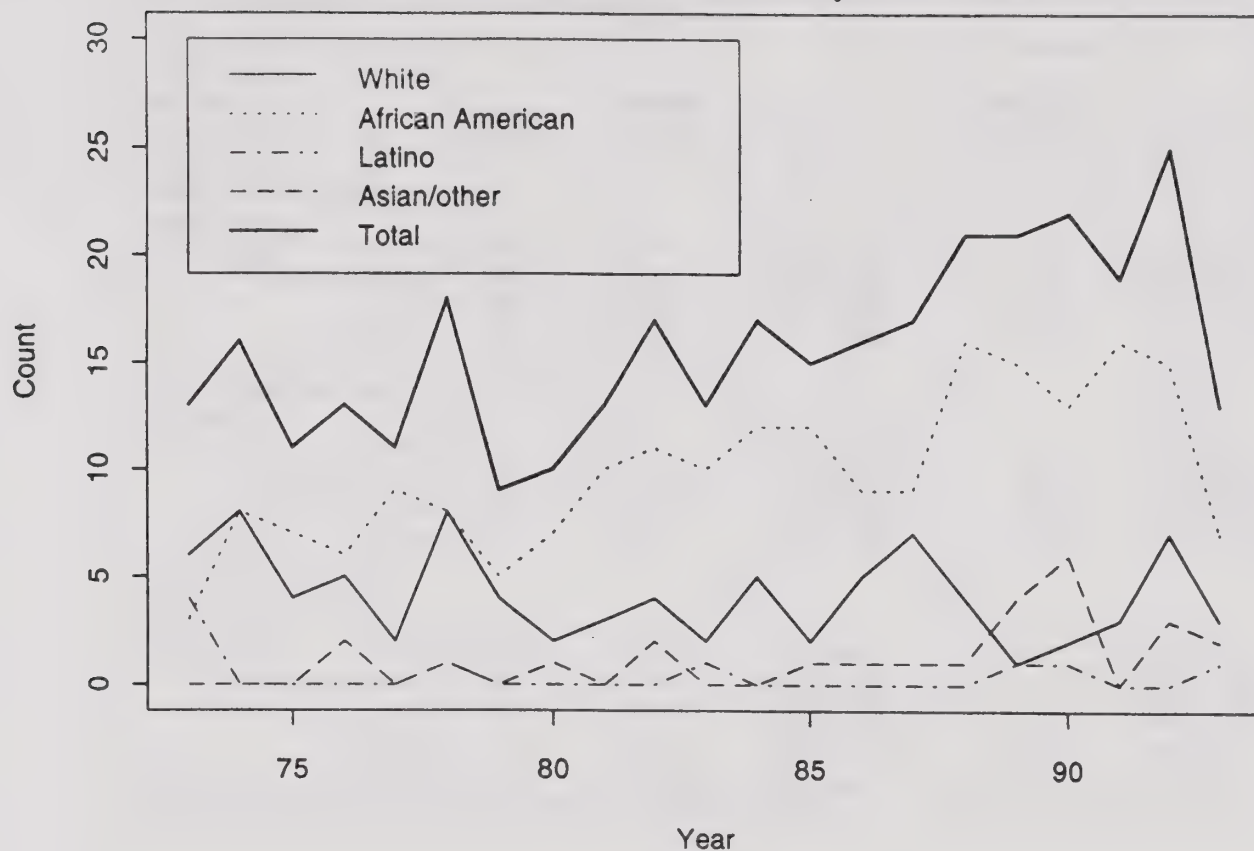


Figure 2a. San Francisco Invasive Breast Cancer Rates 1980-93
Age-Standardized to 1970 U.S. Standard Population

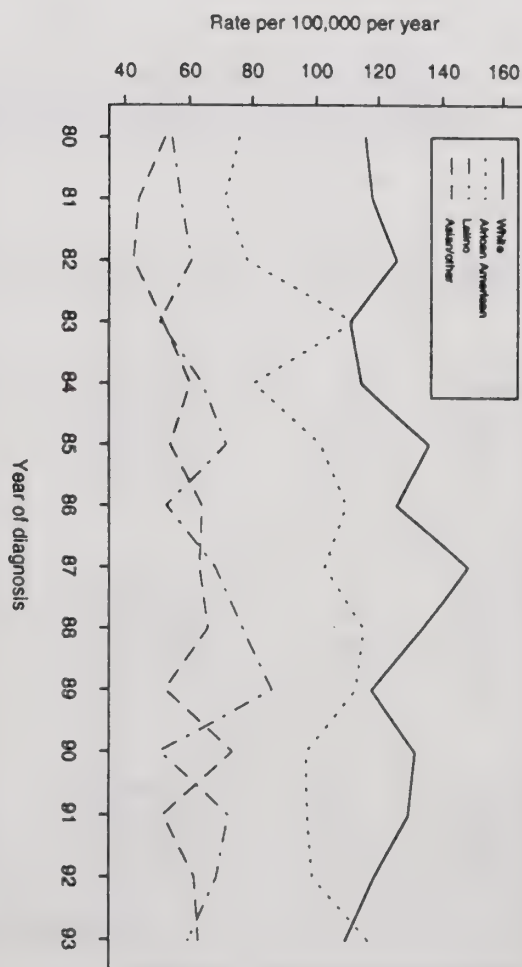
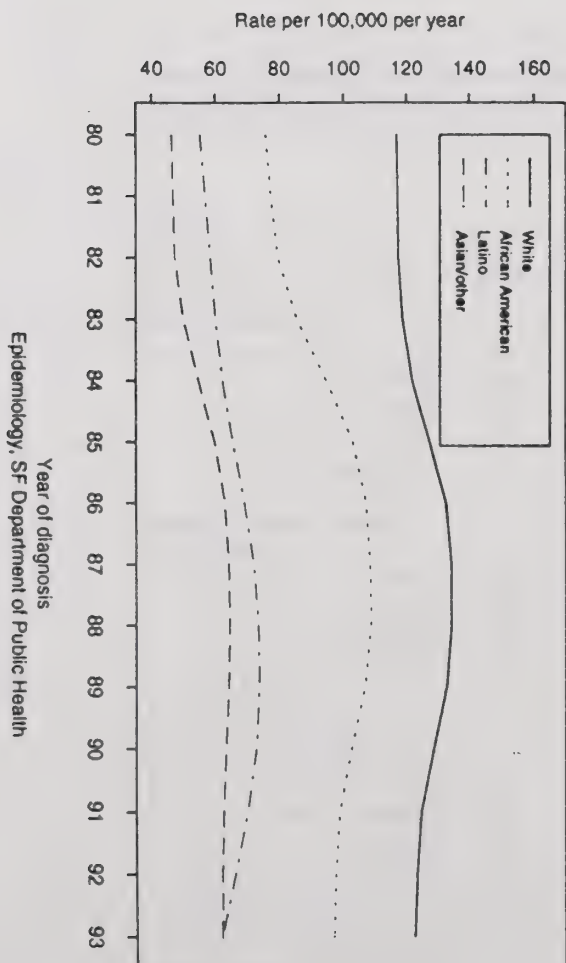


Figure 2b. San Francisco Invasive Breast Cancer Rates 1980-93
Smoothed and Age-Standardized to 1970 U.S. Std Pop



**Table 8. Adjusted Rate Ratios for Race/Ethnicity from Multivariable Cox Models*
Stratified by Era of Diagnosis, Breast Cancer in San Francisco 1973-93 (N = 9414)**

Variable	Breast Cancer Deaths			All Deaths	
	No.	Hazard Rate Ratio	(95% C.I.)	Hazard Rate Ratio	(95% C.I.)
Model 1: Years 1973-79					
Race/ethnicity					
White	2346	1.00	(Reference)	1.00	(Reference)
African American	235	1.33	(1.08 - 1.63)	1.18	(1.00 - 1.38)
Latino	153	0.95	(0.71 - 1.25)	0.90	(0.73 - 1.11)
Asian/other	272	0.90	(0.72 - 1.13)	0.83	(0.70 - 0.98)
Model 2: Years 1980-86					
Race/ethnicity					
White	2252	1.00	(Reference)	1.00	(Reference)
African American	294	1.46	(1.18 - 1.81)	1.29	(1.10 - 1.51)
Latino	187	1.02	(0.77 - 1.36)	0.86	(0.69 - 1.07)
Asian/other	372	1.15	(0.92 - 1.43)	1.00	(0.85 - 1.18)
Model 3: Years 1987-93					
Race/ethnicity					
White	2156	1.00	(Reference)	1.00	(Reference)
African American	331	1.54	(1.16 - 2.04)	1.32	(1.06 - 1.64)
Latino	246	0.80	(0.54 - 1.18)	0.71	(0.53 - 0.95)
Asian/other	570	1.12	(0.85 - 1.47)	1.10	(0.90 - 1.33)

* All models adjusted for age, summary stage, and histological grade

**Table 9. Adjusted Rate Ratios for Race/Ethnicity from Multivariable Cox Models*
Stratified by Stage at Diagnosis, Breast Cancer in San Francisco 1973-93 (N = 8988)**

Variable	Breast Cancer Deaths			All Deaths	
	No.	Hazard Rate Ratio	(95% C.I.)	Hazard Rate Ratio	(95% C.I.)
Model 1: Local Stage					
Race/ethnicity					
White	3764	1.00	(Reference)	1.00	(Reference)
African American	415	1.77	(1.35 - 2.32)	1.26	(1.06 - 1.49)
Latino	302	1.11	(0.76 - 1.62)	0.99	(0.80 - 1.23)
Asian/other	700	1.28	(0.98 - 1.65)	0.91	(0.77 - 1.07)
Model 2: Regional Stage					
Race/ethnicity					
White	2229	1.00	(Reference)	1.00	(Reference)
African American	310	1.43	(1.19 - 1.73)	1.25	(1.07 - 1.46)
Latino	217	0.95	(0.73 - 1.23)	0.86	(0.70 - 1.06)
Asian/other	400	1.03	(0.85 - 1.25)	1.02	(0.87 - 1.19)
Model 3: Distant Stage					
Race/ethnicity					
White	451	1.00	(Reference)	1.00	(Reference)
African American	92	1.15	(0.88 - 1.50)	1.17	(0.92 - 1.48)
Latino	35	0.62	(0.40 - 0.94)	0.66	(0.45 - 0.96)
Asian/other	73	0.82	(0.60 - 1.11)	0.94	(0.70 - 1.19)

* All models adjusted for age, era of diagnosis, and histological grade

Community Health Mini-Profile

Bayview-Hunters Point Health & Environmental Assessment Project

Leading Causes of Death in Bayview-Hunters Point Compared to San Francisco 1989-1995

Tomás Aragón, MD, MPH

Office of Chronic Disease Epidemiology
Community Health & Safety Division
San Francisco Department of Public Health

DRAFT
May 14, 1997

The Bayview-Hunters Point Health & Environmental Assessment Task Force is a collaborative effort between Bayview-Hunters Point neighborhood residents and the following organizations: Golden Gate University Environmental Law & Justice Clinic; South East Alliance for Environmental Justice; Northern California Cancer Center; Lead Poisoning Prevention Project; University of California, San Francisco; San Francisco Department of Public Health, California Department of Health Services, and more.

LEADING SPECIFIC CAUSES OF DEATH BASED ON AGE-ADJUSTED MORTALITY RATES BAYVIEW HUNTERS POINT (1989-1995) COMPARED TO SAN FRANCISCO (1987-1995)

BAYVIEW HUNTERS POINT

SAN FRANCISCO

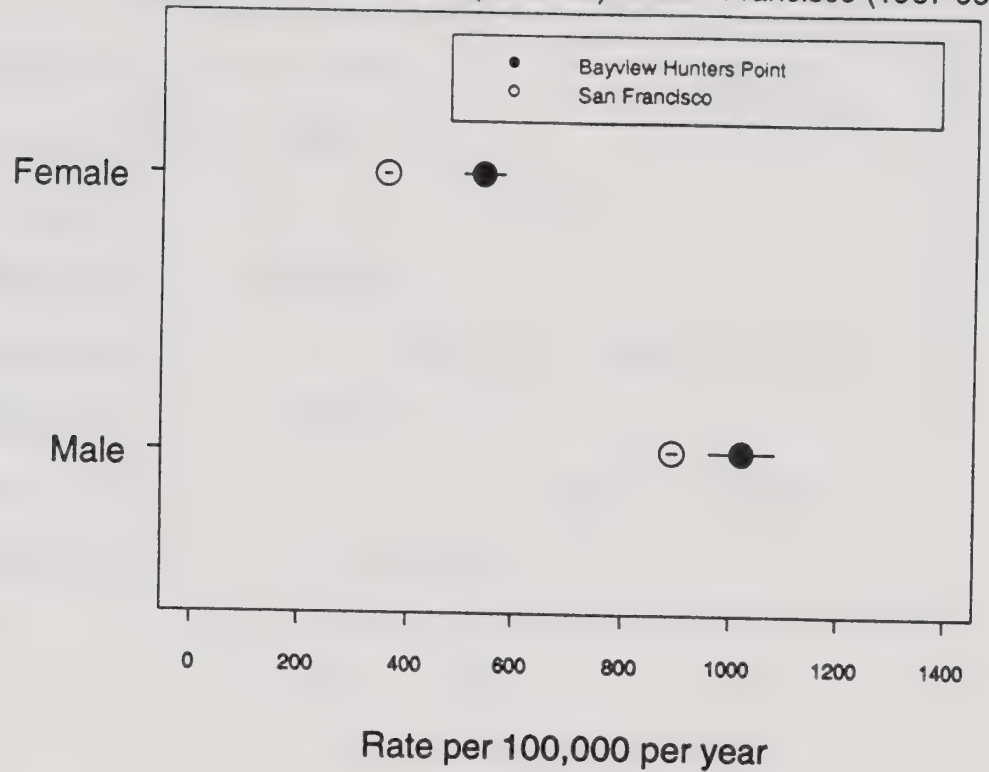
MALES

CAUSE OF DEATH	RATE		RATE
Ischemic heart disease	174.3	HIV infection/AIDS	220.9
HIV infection/AIDS	110.0	Ischemic heart disease	153.8
Homicide	89.1	Lung cancer	47.5
Lung cancer	70.2	Cerebrovascular (Stroke)	33.6
Cerebrovascular (Stroke)	65.4	Pneumonia	25.6
Pneumonia	30.3	Chronic liver & cirrhosis	24.3
Drug poisoning (overdose)	28.3	Suicide	24.0
Prostate cancer	23.8	Chronic obstr. pulm. disease	22.5
Motor Vehicle Traffic	21.0	Drug poisoning (overdose)	20.5
Chronic obstr. pulm. disease	20.3	Homicide	19.6

FEMALES

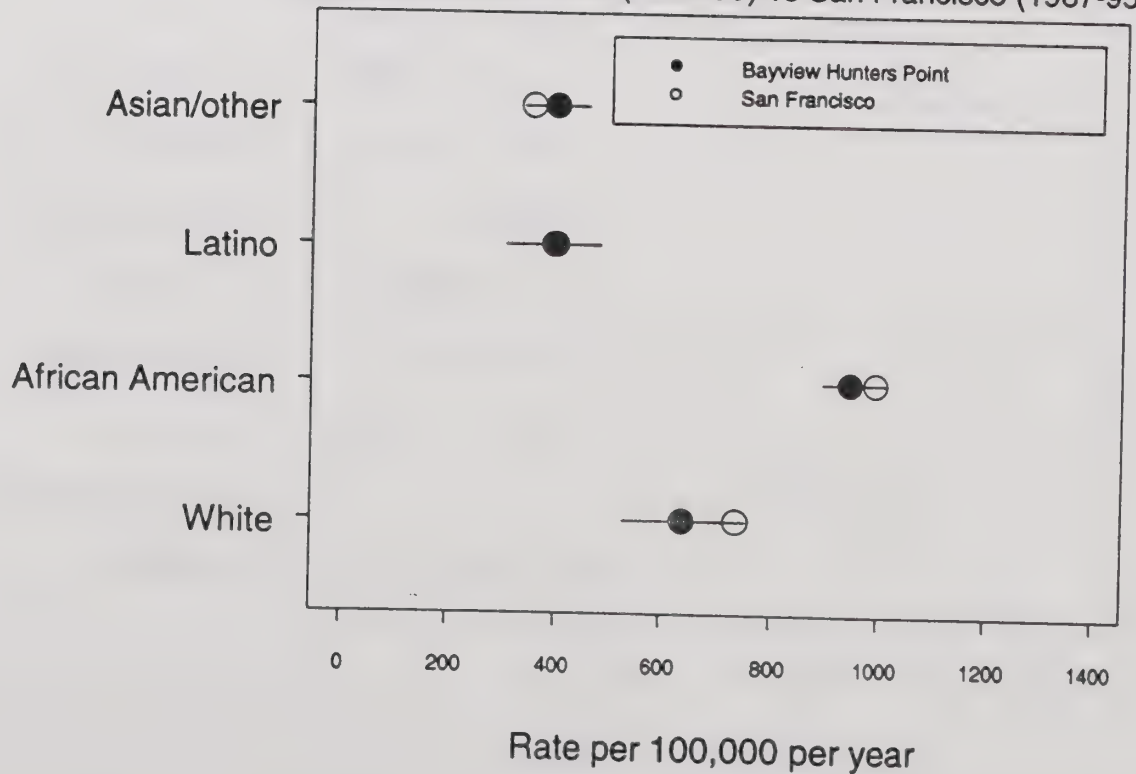
CAUSE OF DEATH	RATE		RATE
Ischemic heart disease	99.3	Ischemic heart disease	71.7
Cerebrovascular (Stroke)	34.5	Cerebrovascular (Stroke)	27.9
Breast cancer	33.2	Lung cancer	23.0
Lung cancer	25.6	Breast cancer	20.2
HIV infection/AIDS	20.7	Pneumonia	12.7
Diabetes mellitus	19.3	Colorectal cancers	10.7
Pneumonia	16.4	Chronic obstr. pulm. disease	10.3
Drug poisoning (overdose)	13.3	Chronic liver & cirrhosis	8.3
Colorectal cancers	11.7	Suicide	7.0
Homicide	11.6	Diabetes mellitus	6.5

Age-Adjusted All-Cause Mortality Rates By Sex
Bayview Hunters Point (1989-95) vs San Francisco (1987-95)



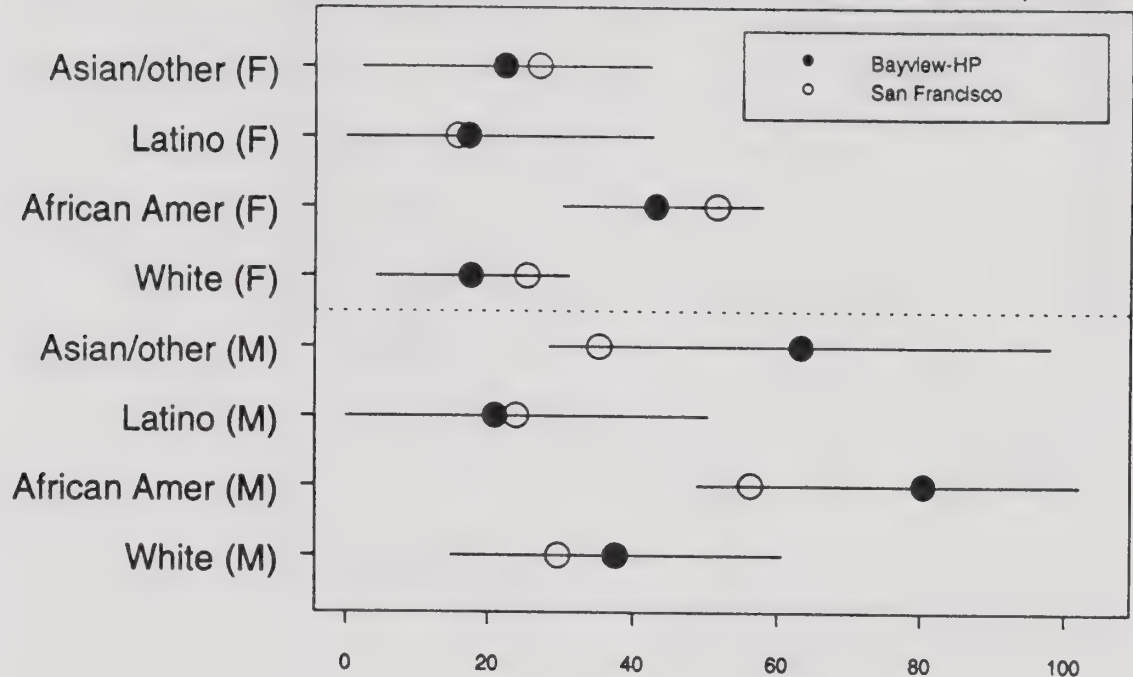
Source: Epidemiology, SFDPH

Age-Adjusted All-Cause Mortality Rates By Race
Bayview Hunters Point (1989-95) vs San Francisco (1987-95)



Source: Epidemiology, SFDPH

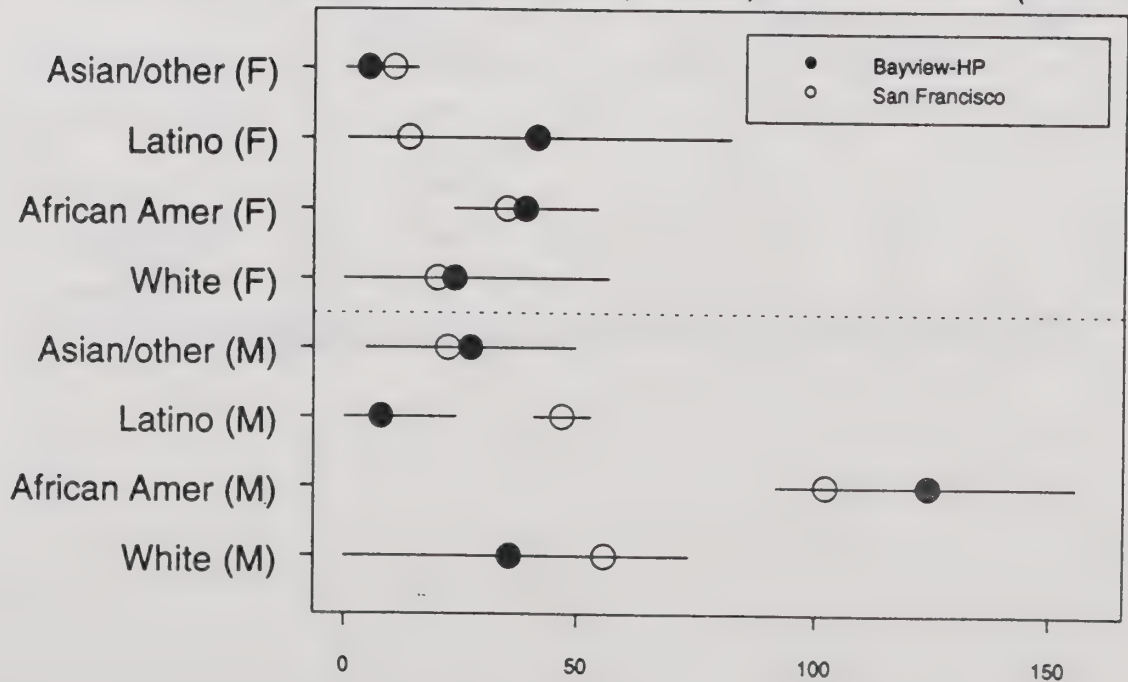
Age-Adjusted Stroke Mortality Rates By Sex and Race
Bayview Hunters Point (1989-95) vs San Francisco (1987-95)



Rate per 100,000 per year

Source: Epidemiology, SFDPH

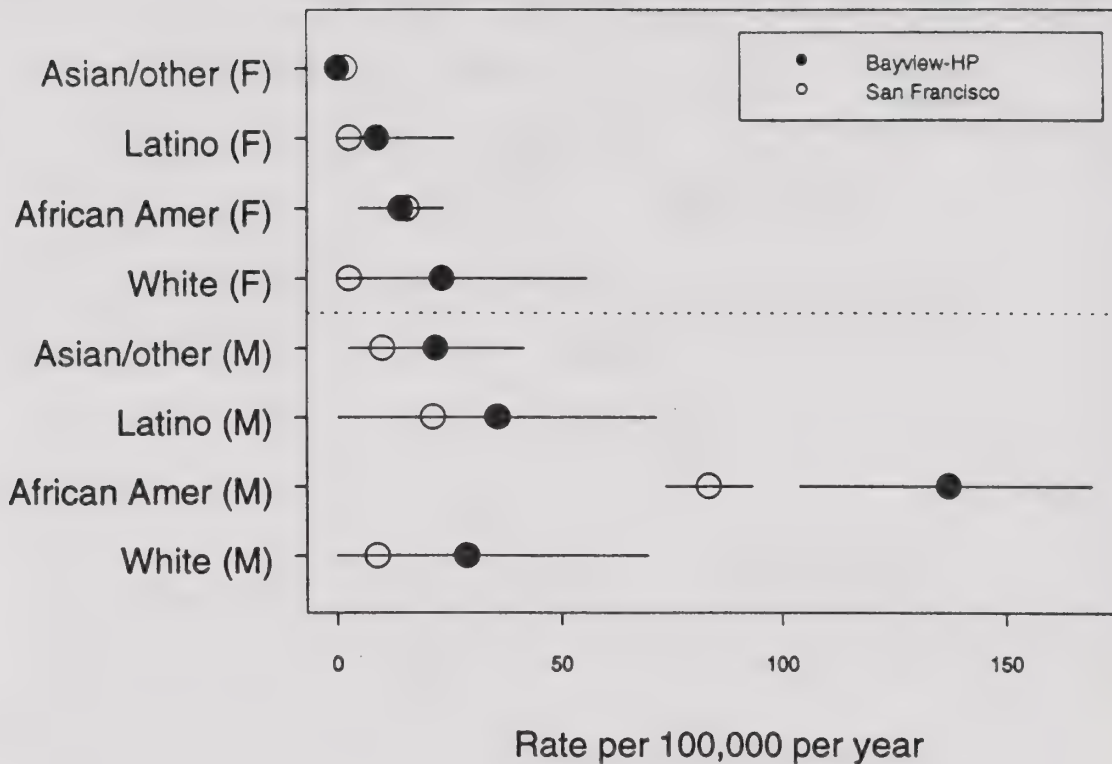
Age-Adjusted Unintentional Injury Mortality Rates By Sex and Race
Bayview Hunters Point (1989-95) vs San Francisco (1987-95)



Rate per 100,000 per year

Source: Epidemiology, SFDPH

**Age-Adjusted Homicide Mortality Rates By Sex and Race
Bayview Hunters Point (1989-95) vs San Francisco (1987-95)**



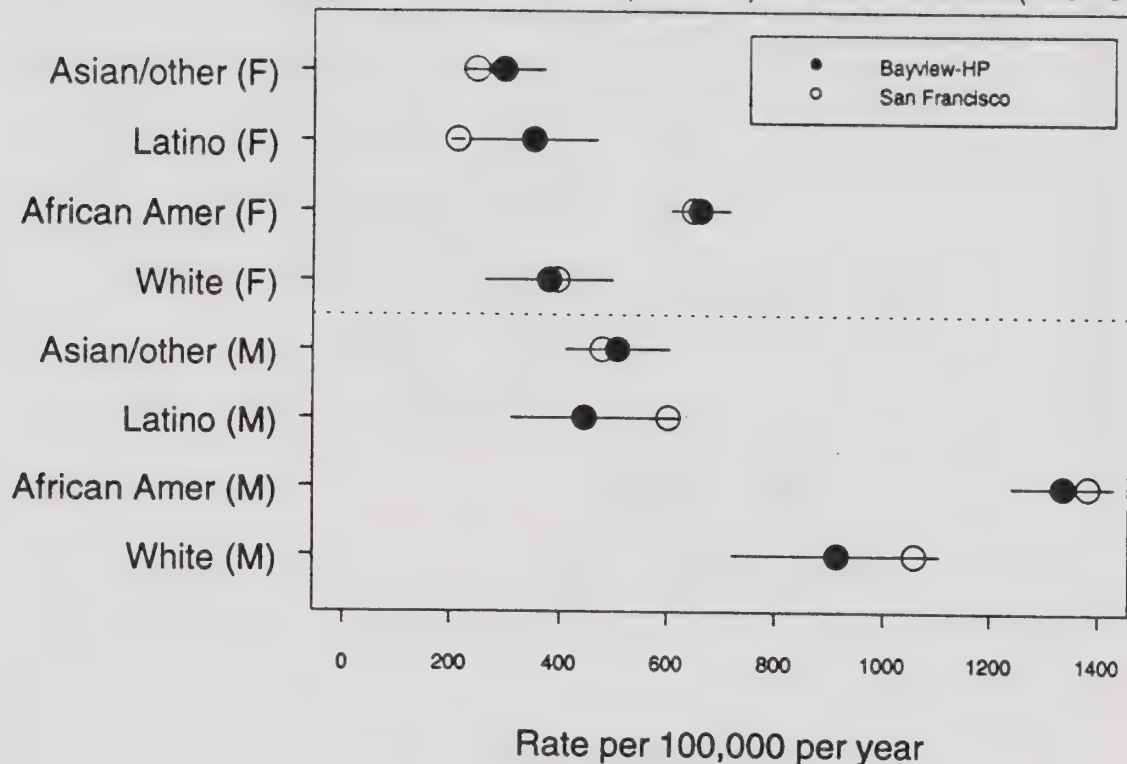
Source: Epidemiology, SFDPH

Table 5-1. Life Expectancy at Birth based on San Francisco Mortality Data 1987 - 1995

Population and years	Males				Females			
	White	African American	Latino	Asian / other	White	African American	Latino	Asian / other
San Francisco 1987-1995	64.9	59.9	73.9	76.5	79.2	72.5	86.5	83.7
United States 1993*	73.1	64.6	na	na	79.5	73.7	na	na
United States 1970*	68.0	60.0	na	na	75.6	68.3	na	na
United States 1940*	62.1	na	na	na	66.6	na	na	na

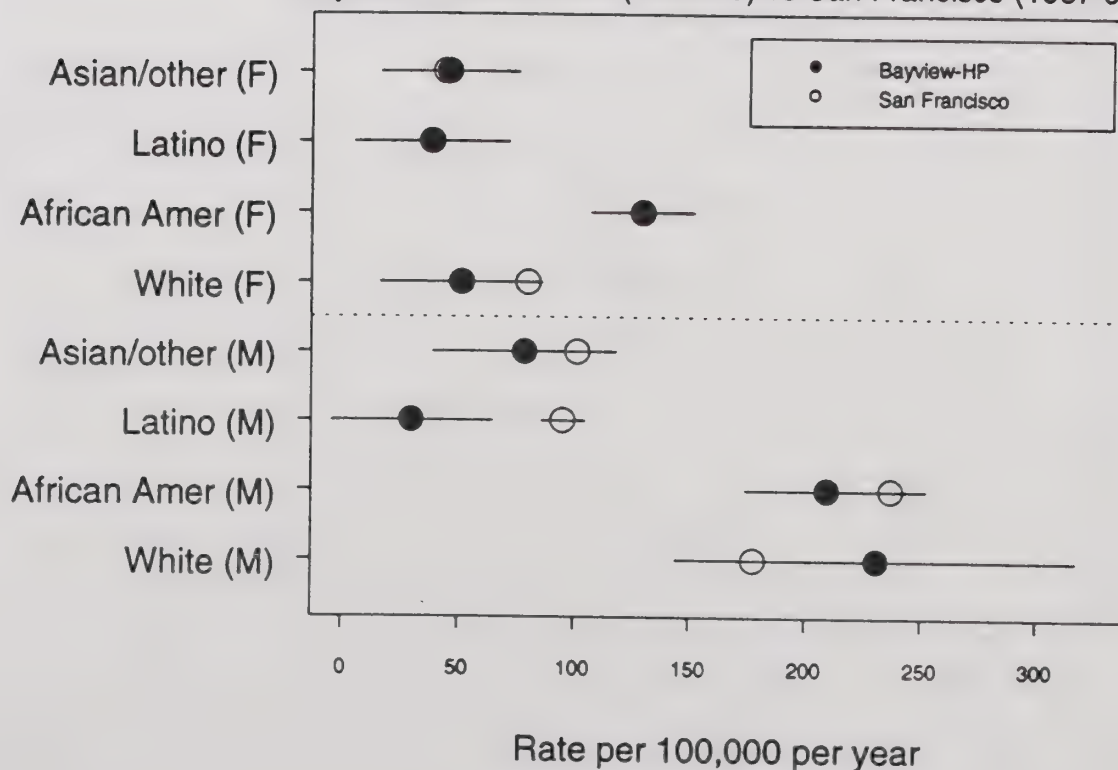
*Gardner P, Hudson BL. Advance report of final mortality statistics, 1993. Monthly vital statistics report; vol 44 no 7, supp

Age-Adjusted All-Cause Mortality Rates By Sex and Race
Bayview Hunters Point (1989-95) vs San Francisco (1987-95)



Source: Epidemiology, SFDPH

Age-Adjusted Ischemic Heart Mortality Rates By Sex and Race
Bayview Hunters Point (1989-95) vs San Francisco (1987-95)



Source: Epidemiology, SFDPH

THEORY OF THE EARTH

The theory of the earth is a branch of geology which deals with the origin and development of the earth and its various parts. It is a science which seeks to explain the processes which have shaped the earth and its features. The theory of the earth is based on the study of the earth's structure and the forces which have acted upon it. It is a science which is constantly developing as new discoveries are made and new theories are proposed.

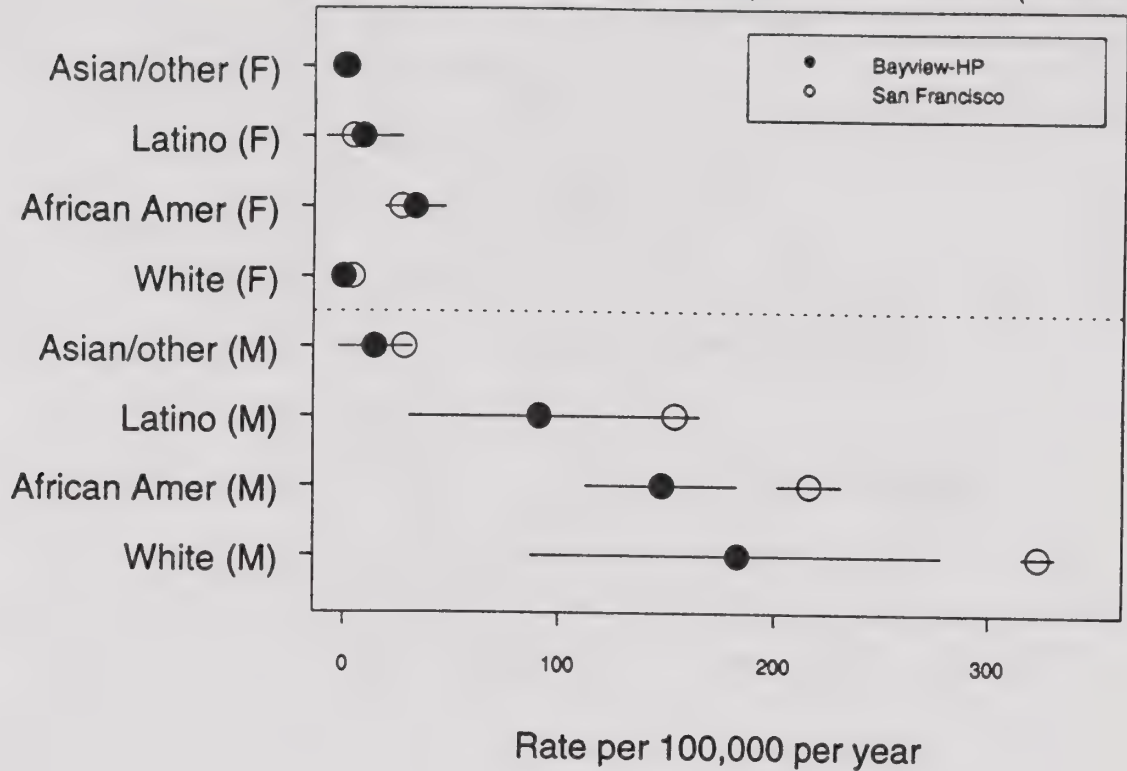
THE EARTH'S STRUCTURE

The earth is composed of several layers or shells. The outermost layer is the crust, which is the thin layer of rock which we live on. Below the crust is the mantle, which is the layer of hot, molten rock. The innermost layer is the core, which is the center of the earth and is composed of iron and nickel. The earth's structure is the result of the forces which have acted upon it over time.

THE EARTH'S HISTORY

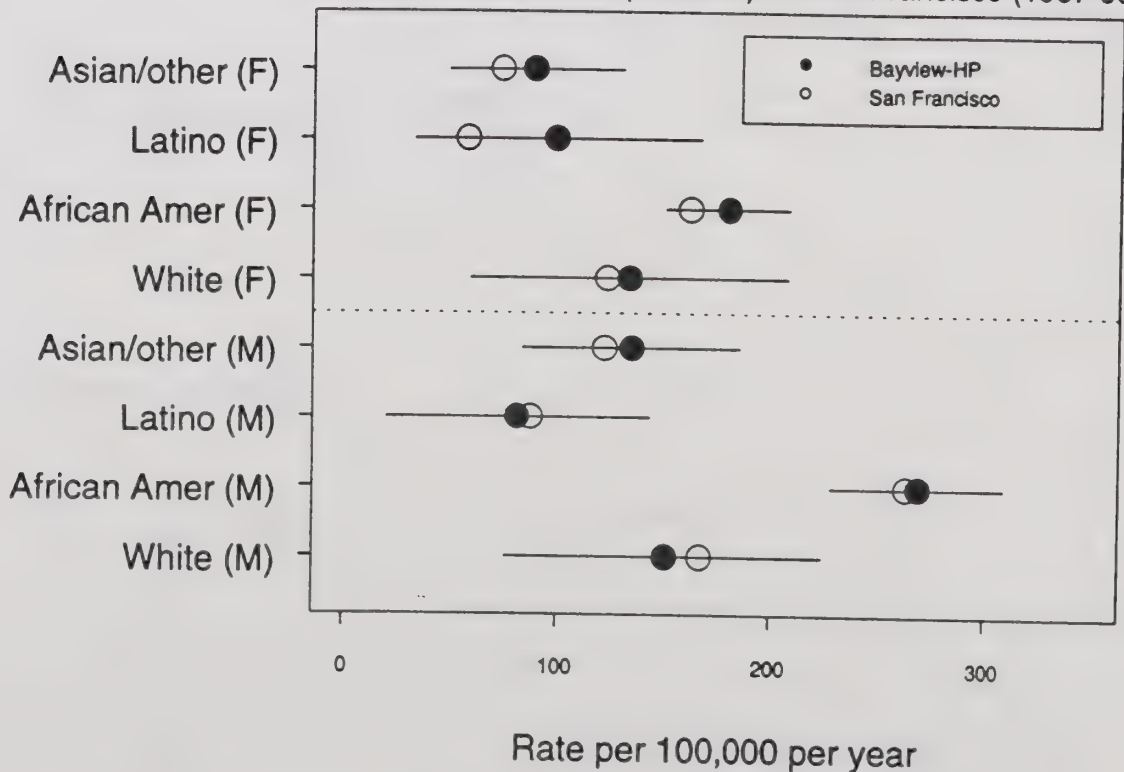
The earth's history is the story of the earth's development from its origin to the present. It is a story of the forces which have shaped the earth and its features. The earth's history is divided into several periods, each of which is characterized by different geological features. The study of the earth's history is a branch of geology which seeks to explain the processes which have shaped the earth and its features. It is a science which is constantly developing as new discoveries are made and new theories are proposed.

Age-Adjusted AIDS Mortality Rates By Sex and Race
Bayview Hunters Point (1989-95) vs San Francisco (1987-95)



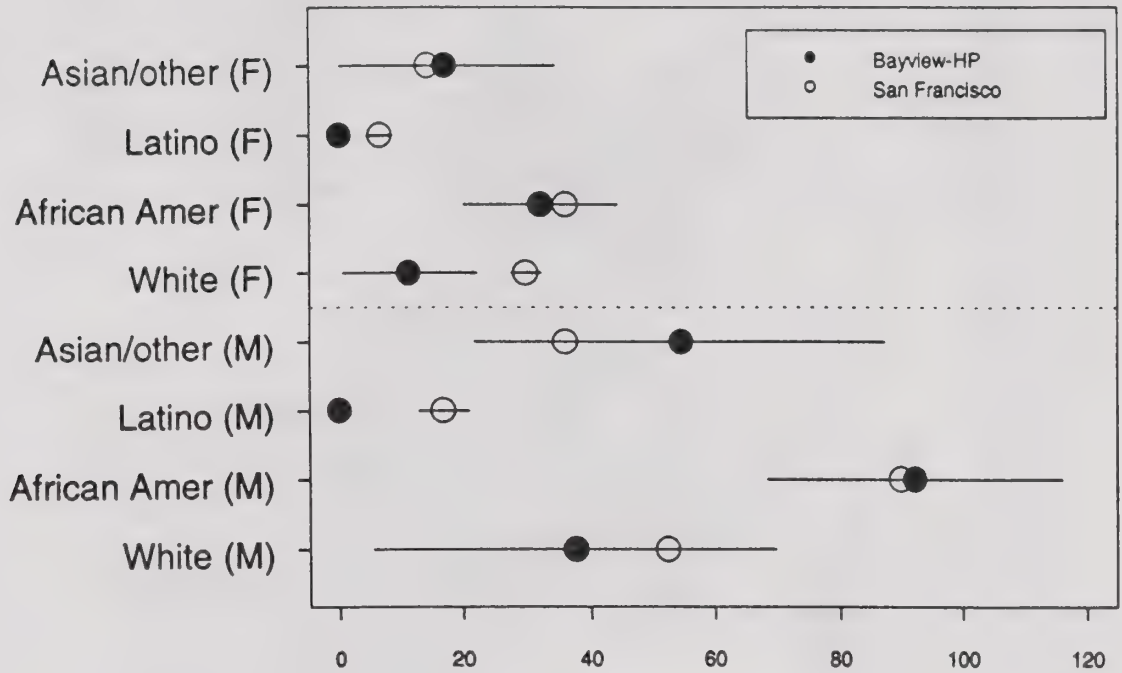
Source: Epidemiology, SFDPH

Age-Adjusted All Cancers Mortality Rates By Sex and Race
Bayview Hunters Point (1989-95) vs San Francisco (1987-95)



Source: Epidemiology, SFDPH

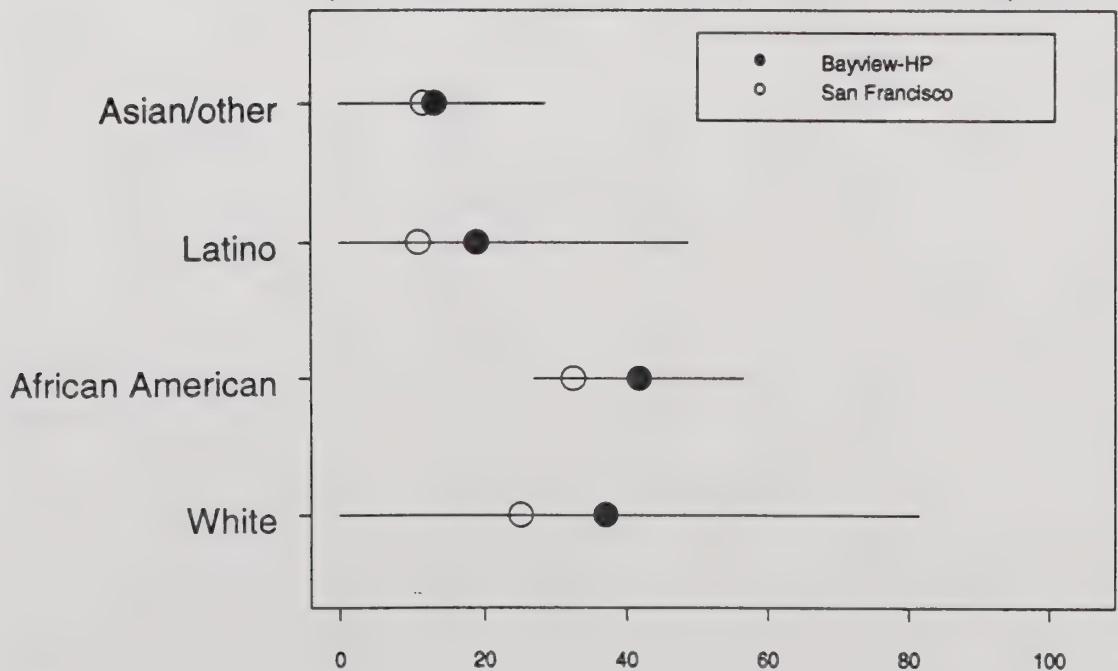
Age-Adjusted Lung Cancer Mortality Rates By Sex and Race
Bayview Hunters Point (1989-95) vs San Francisco (1987-95)



Rate per 100,000 per year

Source: Epidemiology, SFDPH

Age-Adjusted Female Breast Cancer Mortality Rates By Race
Bayview Hunters Point (1989-95) vs San Francisco (1987-95)



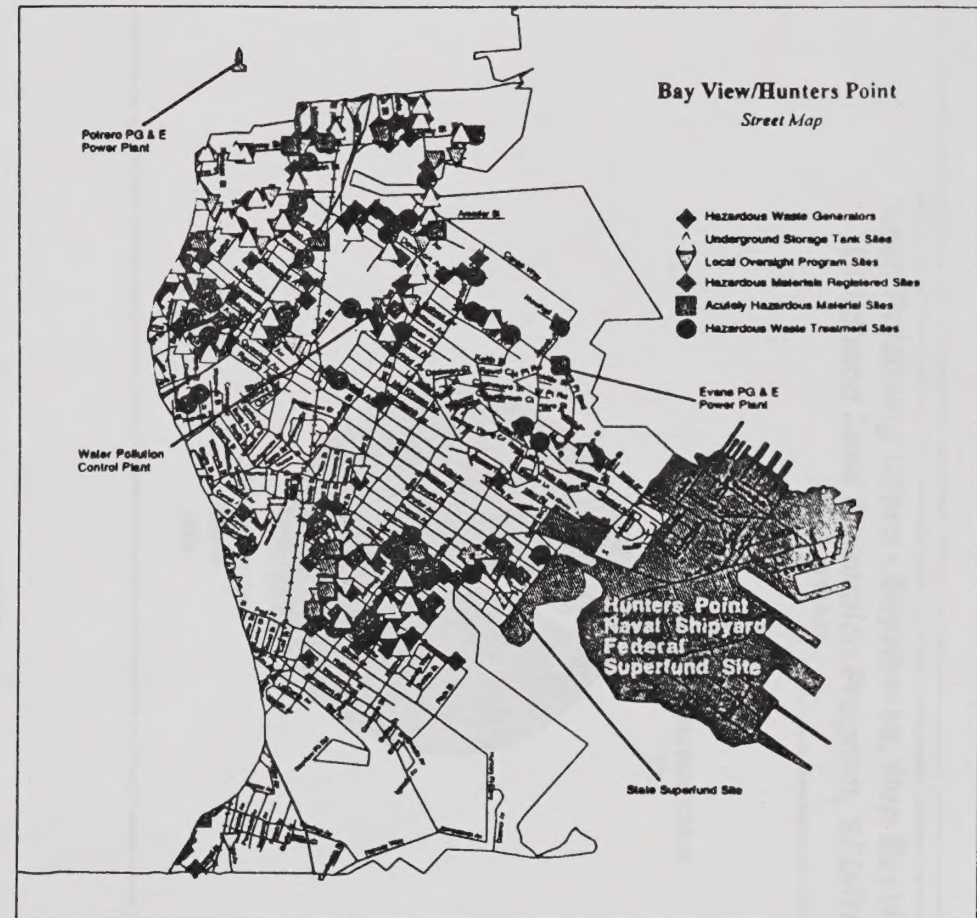
Rate per 100,000 per year

Source: Epidemiology, SFDPH

Overview S.F. Environmental data

Toxics Profile Inventory SF DPH

- Acutely Hazardous Material Sites
- Hazardous Waste Generators
- Underground Storage Sites
- Leaking Underground Storage Sites
(undergoing clean up)
- Hazardous Materials Registered Sites
- Hazardous Waste On-Site Treatment
Facilities
- State EPA Sites
(hazardous waste contaminated sites)
- Power Plants
- BAAQMD Permitted Sites (not mapped)
- Toxic Air Contaminant Sites (not mapped)



Map provided by the San Francisco Department of Public Health through
the Bayview Hunters Point Health & Environmental Task Force
1995



Figure 1. Distribution of the species in the United States, 1991-2000. The map shows the distribution of the species in the United States, with the highest concentrations in the Northeast and Midwest. The legend indicates the level of concentration: Highly concentrated, Moderately concentrated, Scattered, and Not recorded.

Figure 1. Distribution of the species in the United States, 1991-2000.

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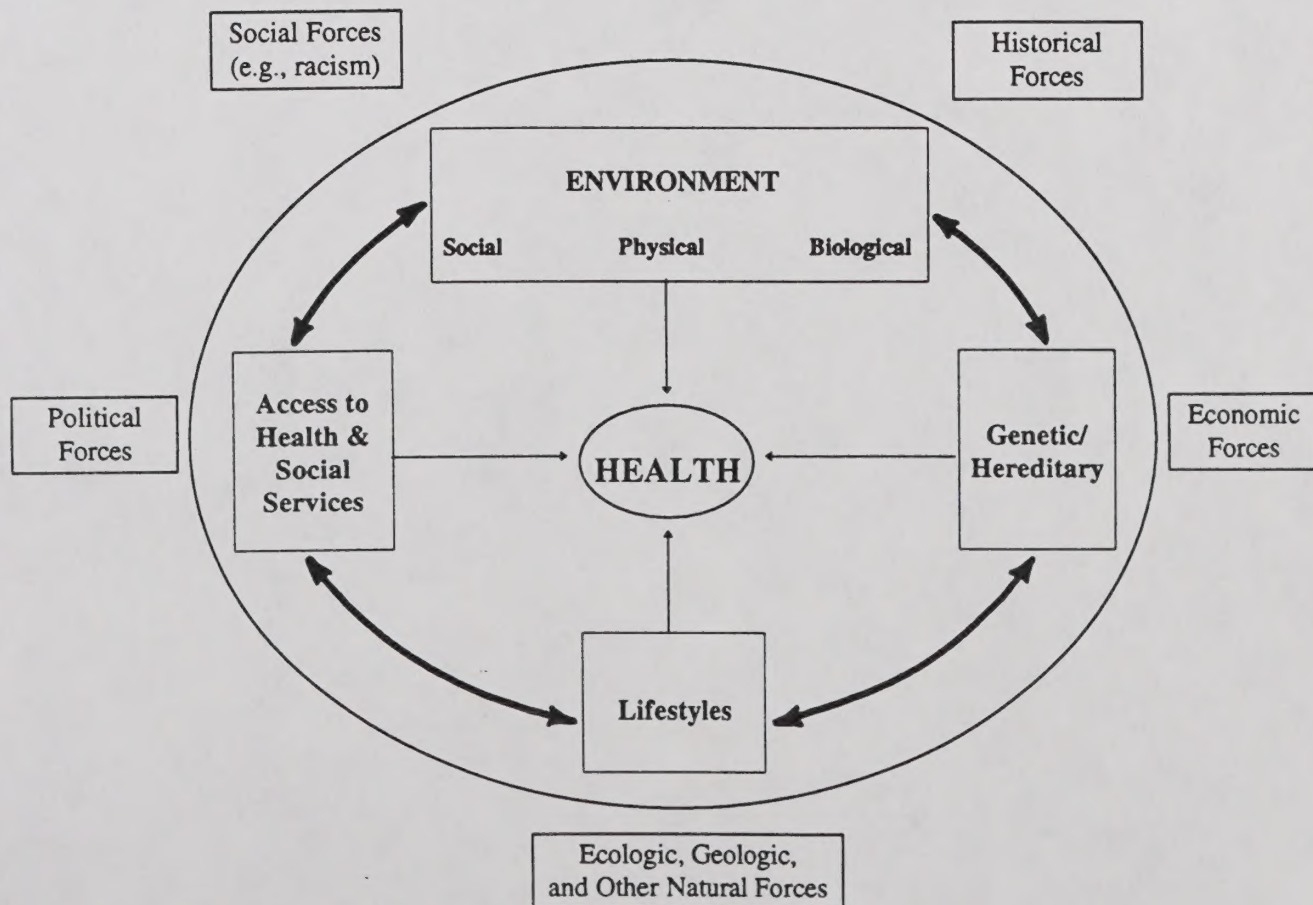
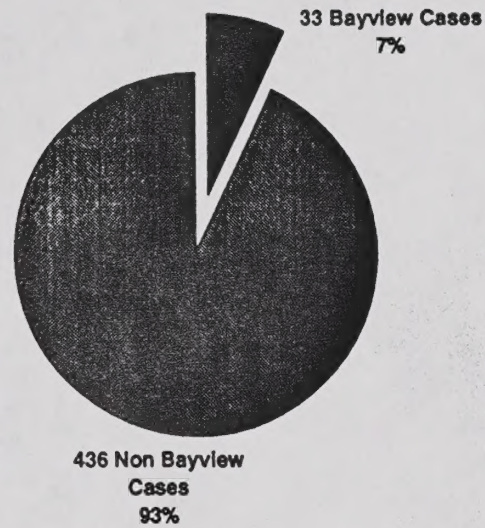
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Lead Poisoning Cases - Bayview vs. Non Bayview
Childhood Lead Prevention Program, SFDPH
 as of 5/15/97





C124917548

Least Favorable Cases - Systemic Risk

Current Least Favorable Cases

